

LAJOS MOLNÁR – PROFESSIONAL DATA

December 15, 2024

Office Address: Department of Analysis,
Bolyai Institute,
University of Szeged,
H-6720 Szeged, Aradi vértanúk tere 1.
Hungary

and

Department of Analysis,
Institute of Mathematics,
Budapest University of Technology and Economics,
H-1111 Budapest,
Egry József u. 1., 'H' épület II. em. 26.,
Hungary

E-mail: molnarl@math.u-szeged.hu,
molnarl@math.bme.hu

URL: <http://www.math.u-szeged.hu/~molnarl/>

Born: August 19, 1964; Kemece, Hungary

Citizenship: Hungarian

Marital Status: Married, two daughters (born in 1994, 1997)

Education, Degrees

MSc: Mathematics, University of Debrecen, 1988 (Antal Járαι, Adviser).
Thesis: A class of measures equivalent to the Haar-measure, and stochastic processes on groups.

PhD: Mathematics, University of Debrecen, 1990. Thesis: HS operator valued c.a.g.o.s. measures and reproducing kernel Hilbert A -modules.

DSc: Mathematics, Hungarian Academy of Sciences, 2005. Dissertation: Preserver Problems on Algebraic Structures of Linear Operators and on Function Spaces

Employment

- 1988–1989: ASSISTANT, Department of Mathematics, Teacher’s Training College, Nyíregyháza, Hungary.
- 1989–1993: ASSISTANT, Institute of Mathematics and Informatics, University of Debrecen, Debrecen, Hungary.
- 1993–1996: ASSISTANT PROFESSOR, Institute of Mathematics and Informatics, University of Debrecen, Debrecen, Hungary.
- 1996–2007: ASSOCIATE PROFESSOR, Institute of Mathematics and Informatics, University of Debrecen, Debrecen, Hungary.
- 2007–2017: FULL PROFESSOR, Institute of Mathematics, University of Debrecen, Debrecen, Hungary.
- 2010–2013: CHAIR OF DEPARTMENT OF ANALYSIS, Institute of Mathematics, University of Debrecen, Debrecen, Hungary.
- 2012 SPRING: VISITING FULL PROFESSOR, Department of Mathematical Sciences, University of Memphis, Memphis, USA.
- 2015- : FULL PROFESSOR, Bolyai Institute, University of Szeged, Szeged, Hungary.
- 2015- : CHAIR OF DEPARTMENT OF ANALYSIS, University of Szeged, Szeged, Hungary.
- 2016- : FULL PROFESSOR (PART TIME), Institute of Mathematics, Budapest University of Technology and Economics, Budapest, Hungary.
- 2019 SPRING: VISITING RESEARCHER, Rényi Institute of Mathematics, Hungarian Academy of Sciences, Hungary.
- 2022 SPRING: VISITING RESEARCHER, Rényi Institute of Mathematics, Hungarian Academy of Sciences, Hungary.

Research Interest

In general: Functional Analysis, Operator Theory, Linear Algebra

More specifically:

- OPERATOR ALGEBRAS: isomorphisms, isometries, derivations, preservers, reflexivity.
- FUNCTION ALGEBRAS: isomorphisms, isometries.
- QUANTUM STRUCTURES: algebraic structures of operators in quantum mechanics and their transformations.

Visiting Researcher for Longer Period

- 1996: MARCH-MAY, University of Maribor, Maribor, Slovenia, Scholarship of Soros Foundation.
- 1996: OCTOBER-DECEMBER, University of Maribor, Maribor, Slovenia, Hungarian State Eötvös Scholarship.
- 1997: MARCH-AUGUST, University of Paderborn, Paderborn, Germany, Scholarship of the Konferenz der Deutschen Akademien der Wissenschaften.
- 2002: JULY-JUNE, 2003, University of Dresden, Dresden, Germany, Research Fellowship of Alexander von Humboldt Foundation.
- 2008: JUNE-AUGUST, University of Dresden, Dresden, Germany, Alexander von Humboldt Foundation.
- 2010: JUNE-AUGUST, University of Dresden, Dresden, Germany, Alexander von Humboldt Foundation.
- 2011: JUNE-SEPTEMBER, University of Ljubljana, Ljubljana, Slovenia, Research grant by the Slovenian Research Agency (ARRS) for renowned researchers from abroad.
- 2012: JANUARY-MAY, University of Memphis, Visiting Full Professor.
- 2013: SEPTEMBER (1 MONTH), University of Calabria and Istituto Nazionale di Fisica Nucleare (INFN), Cosenza, Italy.
- 2015: JULY (1 MONTH), University of Calabria and Istituto Nazionale di Fisica Nucleare (INFN), Cosenza, Italy.
- 2017: JUNE-JULY (1 MONTH), University of Lille 1, UFR de Mathematique, UMR-CNRS 8524 P. Painleve, France.
- 2017: SEPTEMBER-OCTOBER (1 MONTH), Niigata University, Niigata, Japan.
- 2018: JUNE-JULY (1 MONTH), University of Lille 1, UFR de Mathematique, UMR-CNRS 8524 P. Painleve, France.
- 2019: MARCH (1 MONTH), National Sun Yat-Sen University, Department of Applied Mathematics, Kaohsiung, Taiwan.
- 2023: SEPTEMBER-OCTOBER (1,5 MONTH), Institute of Mathematics, Physics, and Mechanics, Ljubljana, Slovenia.
- 2024: MAY-JUNE (1 MONTH), School of Mathematical Sciences, Nankai University, Tianjin, China.
- 2024: NOVEMBER (1 MONTH), School of Mathematical Sciences, Huaqiao University, Quanzhou, China.

Host of Visiting Researcher for Longer Period

- 2004: FEBRUARY-APRIL, Gregor Dolinar, University of Ljubljana, Slovenia.
- 2022: SEPTEMBER-DECEMBER, Almudena Campos Jiménez, University of Cádiz, Spain.
- 2023: FEBRUARY-APRIL, Curt Healey, University of Malta, Malta.

Grants, Research Projects

- 1991-1994: Grant from the Hungarian Scientific Research Fund (OTKA), Grant No. 1652. Team member.
- 1995-1998: Grant from the Hungarian Scientific Research Fund (OTKA), Grant No. T-016846. Team member.
- 1996-1999: Grant from the Hungarian Scientific Research Fund (OTKA), Grant No. F-019322. Project leader.
- 1997-1999: Bilateral research project supported by the Hungarian and Slovene governments. Registration No. OMF B SLO-2/96. Project leader on the Hungarian side.
- 1997-1999: Grant from the Ministry of Education, Hungary. Registration No. FKFP 0304/1997. Project leader.
- 1999-2002: Grant from the Hungarian Scientific Research Fund (OTKA), Grant No. T030082. Team member.
- 2000-2002: Grant from the Ministry of Education, Hungary. Registration No. FKFP 0349/2000. Project leader.
- 2000-2003: Grant from the Hungarian Scientific Research Fund (OTKA), Grant No. T031995. Team member.
- 2001-2002: Bilateral research project supported by the Hungarian and Slovene governments. Registration No. SLO-3/00. Project leader on the Hungarian side.
- 2003-2006: Grant from the Hungarian Scientific Research Fund (OTKA), Grant No. T043080. Team member.
- 2004-2005: Bilateral research project supported by the Hungarian and Slovene governments. Registration No. SLO-10/03. Project leader on the Hungarian side.
- 2004-2007: Grant from the Hungarian Scientific Research Fund (OTKA), Grant No. T046203. Project leader.
- 2006-2007: Bilateral research project supported by the Hungarian and Slovene governments. Registration No. SLO-5/05. Project leader on the Hungarian side.
- 2007-2009: Grant from the Hungarian Scientific Research Fund (OTKA), Grant No. NK68040. Team member.
- 2008-2009: Bilateral research project supported by the Hungarian and Slovene governments. Registration No. SLO-13/07. Project leader on the Hungarian side.
- 2010-2014: Grant from the Hungarian Scientific Research Fund (OTKA), Grant No. K81166. Project leader.
- 2010-2014: Grant from the Hungarian Scientific Research Fund (OTKA), Grant No. NK81402. Team member.
- 2011: Grant by the Slovenian Research Agency (ARRS) for renowned researchers from abroad. Registration No. 1000-11-780001

- 2012–2013: Bilateral research project supported by the Hungarian and Slovene governments. Registration No. TÉT 10-1-2011-0617. Project leader on the Hungarian side.
- 2012–2017: "Lendület" Research Grant by the Hungarian Academy of Sciences. Head of Research Group.
- 2015–2016: HAS-MOST Grant in Project-based Personnel Exchange Program, PPP, Taiwan-Hungary. Project leader on the Hungarian side.
- 2015–2020: Grant from the Hungarian Scientific Research Fund (OTKA), Grant No. K115383. Project leader.
- 2016: Grant for organizing an international conference, Hungarian Academy of Sciences.
- 2020–2024: Grant from the National Research, Development and Innovation Office of Hungary, NKFIH, Grant No. K134944. Project leader.

Awards, Decorations, Honours, Prizes

- 1992: Géza Grünwald Award of János Bolyai Mathematical Society, Hungary
- 1996: Scholarship of the Konferenz der Deutschen Akademien der Wissenschaften.
- 1997: Széchenyi Professorship for the period 1998-2001, Ministry of Education, Hungary
- 1998: Award of the International Symposia on Functional Equations for outstanding contribution to the 36th Symposium, 36th ISFE, Brno, Czech Republic
- 1999: Pál Erdős Award of the Mathematical Section of the Hungarian Academy of Sciences
- 2002: Research Fellowship of Alexander von Humboldt Foundation for 2002-2003.
- 2002: Bolyai Scholarship for the period 2002-2005, Hungarian Academy of Sciences, Hungary
- 2006: Bolyai-Plaquette, Hungarian Academy of Sciences
- 2008: "Publication of the Year" gold medal in the category of Science and Technology, University of Debrecen
- 2011: Grant by the Slovenian Research Agency (ARRS) for renowned foreign researchers for a 3-months research stay
- 2011: Academy Prize of the Hungarian Academy of Sciences
- 2012: Winner of the Momentum (Lendület) Program of the Hungarian Academy of Sciences
- 2015: Decoration called "Knight's Cross of the Order of Merit of the Republic of Hungary" given by the President of Hungary.
- 2023: Kunó Klebelsberg Award, University of Szeged.

2023: Tibor Szele Commemorative Medal, János Bolyai Mathematical Society.

Organizing Conferences

- 1999: Functional Analysis and Applications: Memorial Conference for Béla Szőkefalvi-Nagy, August 2–August 6, 1999, Szeged, Hungary. Local organizer.
- 2003: Von Neumann Centennial Conference: Linear Operators and Foundations of Quantum Mechanics, Budapest, Hungary, 15-20 October, 2003. Member of the Organizing Committee.
- 2013: "Lendület" FIFA'13 Workshop, University of Debrecen, April 26-27, 2013, Debrecen, Hungary. Main organizer.
- 2013: Numbers, Functions, Equations 2013, June 28-30, 2013, Visegrád, Hungary. Member of the Organizing Committee.
- 2014: Young Functional Analysts' Meeting 2014, Institute of Mathematics, April 11-13, 2014, Debrecen, Hungary. Main organizer.
- 2014: CIMPA Research School on "Operator theory and the principles of quantum mechanics" University Moulay Ismail, 2014 September 8-17, Meknes, Morocco. Member of the Scientific Committee.
- 2016: "Lendület" Functional Analysis Meets Linear Algebra Workshop, University of Szeged, April 8-10, 2016, Szeged, Hungary. Main organizer.
- 2016: Contributed Minisymposium "Recent Developments in Non-linear Preservers" at the 20th Conference of the International Linear Algebra Society (ILAS), July 11-15 July, 2016, KU Leuven, Leuven, Belgium. Main organizer.
- 2017: "Preservers Everywhere", June 19-23, 2017, University of Szeged, Szeged, Hungary. Main organizer.
- 2019: "Preserver Weekend in Szeged", April 12-14, 2019, University of Szeged, Szeged, Hungary. Main organizer.
- 2020: Invited Minisymposium "General Preservers" at the 23rd Conference of the International Linear Algebra Society (ILAS), June 22-26, 2020, National University of Ireland, Galway, Ireland. Organizer. Because of the COVID-19 pandemic the meeting was postponed and finally organized between June 20-24, 2022.
- 2021: Minisymposium "Recent Developments on Preservers" at the 8th European Congress of Mathematics, 20-26 June 2021, Portorož, Slovenia. Organizer. Because of the COVID-19 pandemic the meeting was held online.

Editorial Work

Editor-in-Chief of *Acta Scientiarum Mathematicarum* (Szeged)
 Editor of *Acta Mathematica Hungarica*
 Editor of *Aequationes Mathematicae*
 Editor of *Journal of Mathematical Analysis and Application*
 Editor of *Linear Algebra and its Applications*
 Editor of *Linear and Multilinear Algebra*
 Editor of *Operators and Matrices*
 Editor of *Publicationes Mathematicae* (Debrecen)
 Editor of the book series "Bolyai Society Mathematical Studies"
 published by Springer
 Previously: Editor of *Acta Math. Acad. Paedagog. Nyhaziensis*.
N.S., *Advances in Operator Theory*, *Journal of Linear and Topolog-*
ical Algebra, *Journal of Mathematical Analysis*, *Mathematica Slo-*
vaca, *Operators and Matrices*, *Periodica Mathematica Hungarica*.
 Editor of *Versita de Gruyter Book Publishing Program in Mathe-*
matics.

Other Scientific Activities

- 2006–2009: Member of the Mathematical Jury of the Hungarian Scientific Research Fund
- 2007–2012: Member of the Doctoral Committee of the Section of Mathematics, Hungarian Academy of Sciences
- 2008–2011: Chairman of the Committee of Mathematics and Physics, Debrecen Branch of the Hungarian Academy of Sciences
- 2009–2011: Member of the Collegium "Natural Sciences and Technology" of the Hungarian Scientific Research Fund
- 2010–2014: Councillor of the International Quantum Structure Association
- 2011–2014: Member of the Mathematical Committee of the Section of Mathematics, Hungarian Academy of Sciences
- 2013–2017: Member of the Advisory Board of János Bolyai Research Fellowship, Hungarian Academy of Sciences
- 2014–2015: Member of the Doctoral Committee of the Faculty of Science and Informatics, University of Szeged
- 2014–2020: Member of the Doctoral Council of the Hungarian Academy of Sciences

- 2016–2017: Chair of Mathematics and Computer Science panel at the National Research, Development and Innovation Office, Hungary (Hungarian version of NSF)
- 2018: Member of Mathematics and Computer Science panel at the National Research, Development and Innovation Office, Hungary (Hungarian version of NSF)
- 2018–2020: Councillor of the International Quantum Structure Association
- 2019–2021: Member of the Council of Physical Sciences at the National Research, Development and Innovation Office, Hungary (Hungarian version of NSF)
- 2019–: Member of the extended pool of panel members of the Mathematical Sciences panel at FWO (Fonds Wetenschappelijk Onderzoek – Vlaanderen).
- 2020–: Member of the Advisory Board of the Institute of Mathematics of the Slovak Academy of Sciences.
- 2020–: Member of the ESF’s (European Science Foundation) College of Expert Reviewers.
- 2021–2023: Member of the Mathematical Committee of the Section of Mathematics, Hungarian Academy of Sciences.
- 2023–: Member of the Scientific Ethics Committee, Hungarian Academy of Sciences.

Membership in Societies

- 1989–: Member of János Bolyai Mathematical Society.
- 1994–: Member of the American Mathematical Society.
- 2008–: Member of the International Quantum Structure Association.
- 2013–: Member of the International Linear Algebra Society.

University Activities

- 2005–2007: Vice-director of the Institute of Mathematics, University of Debrecen.
- 2008–2011: Member of the Scientific and Habilitation Council of the Faculty of Science and Technology, University of Debrecen.
- 2008–2015: Leader of the program ”Functional Analysis” in the Doctoral School of Mathematics and Computer Sciences, University of Debrecen.

- 2010–2013: Chair of Department of Analysis, Institute of Mathematics, University of Debrecen, Debrecen, Hungary.
- 2015–: Chair of Department of Analysis, University of Szeged, Szeged, Hungary.
- 2015–: Core member of the Doctoral School of Mathematics and Computer Science, University of Szeged.
- 2016–: Leader of the program "Analysis" in the Doctoral School of Mathematics and Computer Science, University of Szeged.
- 2017–: Leader of the MSc program "Mathematics", University of Szeged.
- 2024–: Chair of the Habilitation Committee of Mathematics and Computer Science, University of Szeged.
- 2024–: Member of the Habilitation Committee of the University of Szeged.

Teaching Activities

University of Debrecen:

FOR UNDERGRADUATES: Linear Algebra, Analysis I, II, III, Differential Equations, Real Variables, Measure and Integration, Complex Variables.

Mathematics 3 (in English) for foreign students of physics and electrical engineering, College Math - Functions (in English) for foreign students.

FOR GRADUATES AND PHD STUDENTS: Functional Analysis, Banach Algebras, C^* -algebras, von Neumann Algebras.

University of Szeged:

FOR UNDERGRADUATES: Analysis, Measure and Integral, Complex Variables.

FOR GRADUATES AND PHD STUDENTS: Functional Analysis, Selected Topics in Functional Analysis, Banach Algebras and Operator Theory.

Budapest University of Technology and Economics:

FOR UNDERGRADUATES: Functional Analysis for Physicists, Functional Analysis I, Functional Analysis II

FOR GRADUATES AND PHD STUDENTS: Banach Algebras, Selected Topics in Functional Analysis, Operator Theory, Spectral Theory.

Central European University:

PHD STUDENTS: Topics in Analysis, Banach Algebras and Operator Theory.

Teaching Activities Abroad

- 1996: WINTERSEMESTER, University of Maribor, Slovenia. Graduate Course in Real Analysis.
- 1997: SUMMERSEMESTER, University of Paderborn, Germany. Seminar Funktionentheorie/Zahlentheorie.
- 2012: SPRINGSEMESTER, University of Memphis, USA. Undergraduate Course on Linear Algebra.
- 2015: SPRINGSEMESTER, MAY, Niigata University, Niigata, Japan. Undergraduate course on Functional Analysis. Graduate course on Preserver Problems.
- 2017: SPRINGSEMESTER, MAY, Niigata University, Niigata, Japan. Undergraduate course on Functional Analysis. Graduate course on Preserver Problems.
- 2023: AUGUST, Ritsumeikan University, Kusatsu, Japan. Intensive graduate course on Preserver Problems.

Lecture Notes

- [1] *Complex Functions*, manuscript, in Hungarian, 1992.
- [2] *Spectral Theory and von Neumann Algebras*, manuscript, in Hungarian, 1994.
- [3] *Banach Algebras, C^* -Algebras and von Neumann Algebras*, manuscript, in Hungarian, 2001.

Thesis Directed

- 1993: Nóra Kontra: Riesz representation theorems. (in Hungarian) [MSc]
- 1995: Péter Battyányi: Jordan $*$ -derivations on operator algebras. (in Hungarian) [*Competition work, distinguished national first prize*]
- 1996: Péter Battyányi: Jordan $*$ -derivations on operator algebras. (in Hungarian) [MSc]

- 1996: Tibor Molnár: Calculus in the secondary school. (in Hungarian) [MSc]
- 1997: Csaba Noszály: Isomorphisms of function algebras. (in Hungarian) [MSc]
- 1997: Máté Györy: Isometries of function algebras and semigroup isomorphisms of operator ideals. (in Hungarian) [*Competition work, national first prize*]
- 1998: Anna Németh: The three fundamental theorems of functional analysis. (in Hungarian) [MSc]
- 1998: Máté Györy: Isometries of function algebras and semigroup isomorphisms of operator ideals. (in Hungarian) [MSc]
- 1998: Zsolt Vida: Derivations, Jordan *-derivations and automorphisms. (in Hungarian) [MSc]
- 1999: Máté Györy: Diameter preserving linear bijection of $C_0(X)$ and the reflexivity of the isometry group of the suspension of $B(H)$. (in Hungarian) [*Competition work, national first prize; 'Pro Scientia Medal' of the Hungarian Academy of Sciences*]
- 2001: Mátyás Barczy and Mariann Tóth: Local automorphisms of the sets of states and effects on a Hilbert space. (in Hungarian) [*Competition work, national first prize*]
- 2001: Mariann Tóth: Local maps of operator algebras. (in Hungarian) [MSc]
- 2008: Emese Tünde Rozsályi: The life and work of Frigyes Riesz (in Hungarian) [MSc]
- 2010: Patrícia Szokol: Classical and quantum relative entropy [MSc]
- 2011: Patrícia Szokol: Maps on positive semidefinite operators preserving relative entropy [*Competition work, national special prize*]
- 2015: Marcell Gaál: Transformations preserving the sandwiched Rényi entropy and its generalizations, Budapest University of Technology and Economics, [MSc]
- 2017: László Szilas: Local automorphisms of operator algebras, University of Szeged, [MSc]
- 2021: Bálint Gyenti: New results on local automorphisms, Budapest University of Technology and Economics, (in Hungarian) [MSc + *Competition work, national first prize*]
- 2023: Ábel Komálovics: A one-parameter extension of the Bures and Hellinger distances, and trace characterizations, Budapest University of Technology and Economics, (in Hungarian) [MSc + *Competition work, national second prize*]

PhD Students

- Máté Győry (U Debrecen, 1998–2001). 'Preserver problems and reflexivity problems on operator algebras and on function algebras', PhD Dissertation, 2003.
- Gergő Nagy (U Debrecen, 2008–2011). 'Preserver problems on structures of positive operators', PhD Dissertation, 2013.
- Patrícia Szokol (U Debrecen, 2010–2013). 'Preserver problems and separation theorems', PhD Dissertation, 2015.
- Roberto Beneduci (U Debrecen, 2013–2014). 'Mathematical structures of positive operator valued measures and applications', PhD Dissertation, 2014.
- Marcell Gaál (U Szeged, 2016–2019). 'On some isometries and other preservers', PhD Dissertation, 2019.
- Andrianampoinimerina Ramanantoanina (CEU, 2019–2022). 'Partial order on positive Hilbert space operators and related preserver problems', PhD Dissertation, 2022.
- Richárd Simon (BME, 2020–).
- Bálint Gyenti (BME, 2021-2023, not finished).

Membership in PhD Committees

- Vilmos Prokaj, Eötvös Loránd University, Budapest, April 9, 1999.
- Károly Nagy, University of Debrecen, Debrecen, May 31, 2001.
- Bálint Farkas, Eötvös Loránd University, Budapest, May 26, 2004.
- Zsolt Balogh, University of Debrecen, Debrecen, September 21, 2004.
- Attila Háy, University of Debrecen, Debrecen, October 7, 2005.
- Zoltán Kaiser, University of Debrecen, Debrecen, January 27, 2006.
- Fülöp Ágnes, Eötvös Loránd University, Budapest, May 5, 2006.
- Tibor Juhász, University of Debrecen, Debrecen, October 19, 2006.
- Péter Varga, University of Debrecen, Debrecen, December 21, 2006.
- Ágnes Baran, University of Debrecen, Debrecen, November 27, 2007.
- Pál Burai, University of Debrecen, Debrecen, January 15, 2008.
- Árpád Baricz, University of Debrecen, Debrecen, October 2, 2008.
- Izabella Stuhl, University of Debrecen, Debrecen, March 5, 2009.
- Endre Iglói, University of Debrecen, Debrecen, March 20, 2009.
- Zoltán Léka, University of Szeged, Szeged, May 6, 2009.
- Zita Makó, University of Debrecen, Debrecen, November 13, 2009.
- Fruzsina Mészáros, University of Debrecen, Debrecen, March 17, 2010.
- András Bazsó, University of Debrecen, Debrecen, October 15, 2010.
- István Vajda, University of Debrecen, Debrecen, October 27, 2010.
- József Korándi, University of Debrecen, Debrecen, June 12, 2012.
- Ágota Orosz-Kaiser, University of Debrecen, Debrecen, June 27, 2012.

- Szabolcs Baják, University of Debrecen, Debrecen, July 3, 2012.
- Zsolt Szűcs, Eötvös Loránd University, Budapest, 2014.
- András Szántó, Budapest University of Technology and Economics, Budapest, January 23, 2015.
- Ferenc Várady, University of Debrecen, Debrecen, February 11, 2015.
- Nóra Szakács, University of Szeged, Szeged, May 12, 2016.
- Tivadar Danka, University of Szeged, Szeged, October 3, 2016.
- Fadil Chabbabi, University of Lille 1, Lille, France, July 7, 2017.
- Hent van Imhoff, Leiden University, Leiden, The Netherlands, June 11, 2019.
- María de Nazaret Cueto Avellaneda, University of Almeria, Almeria, Spain, September 11, 2020. President of the board at public defense.
- María Luisa Castillo Godoy, University of Granada, Granada, Spain, February 16, 2023. President of the board at public defense.
- Almudena Campos Jiménez, University of Cádiz, Cádiz, Spain, September, 2023. President of the board at public defense.

Membership in Habilitation Committees

- Kálmán Liptai, University of Debrecen, Debrecen, November 24, 2011.
 Mihály Bessenyei, University of Debrecen, Debrecen, November 25, 2011.
 István Blahota, University of Debrecen, Debrecen, October 16, 2013.
 Pál Burai, University of Debrecen, Debrecen, November 20, 2014.
 Gábor Pusztai, University of Szeged, Szeged, October 9, 2015.
 Tamás Waldhauser, University of Szeged, Szeged, December 4, 2015.
 Martin Bohata, Czech Technical University in Prague, Prague, February, 2019.
 Dávid Kunszenti-Kovács, Eötvös Loránd University, Budapest, November 30, 2020.
 Béla Nagy, University of Szeged, Szeged, February 14, 2022.
 Mónika Van Leeuwen-Polner, University of Szeged, Szeged, April 3, 2023.

Membership in DSc Committees

- Gábor Elek, Hungarian Academy of Sciences, Budapest, January 28, 2010.
- Tamás Keleti, Hungarian Academy of Sciences, Budapest, December 20, 2010.
- Alice Fialowski, Hungarian Academy of Sciences, Budapest, November 14, 2011.

- Sándor Fridli, Hungarian Academy of Sciences, Budapest, May 11, 2015.
- Máté Matolcsi, Hungarian Academy of Sciences, Budapest, June 23, 2015.
- Anna Jenčova, Slovak Academy of Sciences, Bratislava, September 17, 2018.
- Alexandru Kristály, Hungarian Academy of Sciences, Budapest, June 26, 2019.

LIST OF PUBLICATIONS

Book

- [MB] L. Molnár, *Selected Preserver Problems on Algebraic Structures of Linear Operators and on Function Spaces*, Lecture Notes in Mathematics, Vol. 1895, p. 236, Springer, 2007.
MR 2007g:47056, Zbl. 1119.47001

Research papers

- [1] L. Molnár, *A short survey of recent characterizations of central positive definite elements in C^* -algebras*, in Postpandemic Operator Theory : Conference Proceedings, Timisoara, June 27 - July 1, 2022. Edited by Dumitru Gaşpar, William T. Ross, Dan Timotin, Florian-Horia Vasilescu, Theta Series in Advanced Mathematics, Theta, Bucharest 2024.
- [2] L. Molnár, *Some new characterizations of central positive elements in C^* -algebras*, J. Math. Anal. Appl. **534** (2024), 128055.
- [3] L. Molnár and R. Simon, *On some algebraic properties related to Heron type operator means on positive definite cones of C^* -algebras*, Linear Algebra Appl. **685** (2024), 214–246.
- [4] Á Komálovics and L. Molnár, *On a parametric family of distance measures that includes the Hellinger and the Bures distances*, J. Math. Anal. Appl. **529** (2024), 127226
- [5] L. Molnár, *Applications of the automatic additivity of positive homogeneous order isomorphisms between positive definite cones in C^* -algebras*, In: Binder, I., Kinzebulatov, D., Mashreghi, J. (eds) Function Spaces, Theory and Applications, p. 77-104. Fields Institute Communications, vol 87. Springer, Cham., 2023. https://doi.org/10.1007/978-3-031-39270-2_4
- [6] L. Molnár, *100 years of Acta Szeged*, EMS Magazine **126** (2022), 27–32.
- [7] Y. Dong, L. Li, L. Molnár and N.C. Wong, *Transformations preserving the norm of means between positive cones of general and commutative C^* -algebras*, J. Operator Theory **88** (2022), 365–406.

- [8] L. Molnár, *On certain order properties of non Kubo-Ando means in operator algebras*, Integral Equations Operator Theory **94** Article number: 25 (2022).
- [9] L. Molnár, *A new look at local maps on algebraic structures of matrices and operators*, New York J. Math. **28** (2022), 557–579.
- [10] L. Molnár, *Maps on positive definite cones of C^* -algebras preserving the Wasserstein mean*, Proc. Amer. Math. Soc. **150** (2022), 1209–1221.
- [11] L. Molnár, *On the order determining property of the norm of a Kubo-Ando mean in operator algebras*, Integral Equations Operator Theory **93**, Article number: 53 (2021)
- [12] L. Molnár, *On dissimilarities of the conventional and Kubo-Ando power means in operator algebras*, J. Math. Anal. Appl. **504** (2021) 125356.
- [13] L. Molnár and A. Ramanantoanina, *On functional representations of positive Hilbert space operators*, Integral Equations Operator Theory **93**, Article number: 2 (2021)
- [14] L. Li, L. Molnár and L. Wang, *On preservers related to the spectral geometric mean*, Linear Algebra Appl. **610** (2021), 647–672.
- [15] B. Gyenti and L. Molnár, *On local automorphisms of some quantum mechanical structures of Hilbert space operators*, New York J. Math. **26** (2020), 1444–1472.
- [16] L. Molnár, *Maps on positive cones in operator algebras preserving power means*, Aequationes Math. **94** (2020), 703–722.
- [17] L. Molnár, *Jordan isomorphisms as preservers*, Linear and multilinear algebra and function spaces, 19–41, Contemp. Math., 750, Centre Rech. Math. Proc., Amer. Math. Soc., Providence, RI, 2020.
- [18] L. Molnár, *Spectral characterization of Jordan-Segal isomorphisms of quantum observables*, J. Operator Theory **83** (2020), 179–195.
- [19] F. Chabbabi, M. Mbekhta and L. Molnár, *Characterizations of Jordan $*$ -isomorphisms of C^* -algebras by weighted geometric mean related operations and quantities*, Linear Algebra Appl. **588** (2020), 364–390.
- [20] L. Molnár, *Quantum Rényi relative entropies: their symmetries and their essential difference*, J. Funct. Anal. **277** (2019), 3098–3130.

- [21] L. Molnár, *On 2-local *-automorphisms and 2-local isometries of $B(H)$* , J. Math. Anal. Appl. **479** (2019), 569–580.
- [22] L. Molnár, *Characterizations of certain means of positive operators*, Linear Algebra Appl. **567** (2019), 143–166.
- [23] L. Molnár, *Maps between the positive definite cones of operator algebras preserving a norm of a geodesic correspondence*, Acta Sci. Math. Szeged, **84** (2018), 451–463.
- [24] L. Molnár, *Bures isometries between density spaces of C^* -algebras*, Linear Algebra Appl. **557** (2018), 22–33.
- [25] L. Molnár, *Strength functions: a strange function space associated to positive semidefinite operators*, Proceedings of Conference on Function Algebras 2017, 36–43. <http://billiards.s19.xrea.com/kansuukan/H29Report.pdf>
- [26] L. Molnár, *Busch-Gudder metric on the cone of positive semidefinite operators and its isometries*, Integral Equation Operator Theory (2018) 90:20.
- [27] L. Molnár, *Petz Dénes (1953–2018)*, (in Hungarian) Érintő, March 2018. <http://www.ematlap.hu/index.php/hirek-ujdonsagok-2018-03/677-petz-denes-2>
- [28] L. Molnár, *Algebraic isomorphisms in the descriptions of generalized isometries on spaces of positive definite matrices*, RIMS Kôkyûroku, No. 2035 (2017), 94–108.
- [29] H.Y. Chen, Gy.P. Gehér, C. N. Liu, L. Molnár, D. Viosztek, and N. C. Wong, *Maps on positive definite operators preserving the quantum χ_α^2 -divergence*, Lett. Math. Phys. **107** (2017), 2267–2290.
- [30] L. Molnár, *On the surjectivity of generalized isometries on the positive definite cone of matrices*, Mediterr. J. Math. **14**:161 (2017).
- [31] L. Molnár, *The arithmetic, geometric and harmonic means in operator algebras and transformations among them*, Recent Methods and Research Advances in Operator Theory, Ed. F. Botelho, R. King, and T.S.S.R.K. Rao, 182–193, Contemp. Math., 687, Amer. Math. Soc., Providence, RI, 2017.
- [32] M. Gaál and L. Molnár, *Transformations on density operators and on positive definite operators preserving the quantum Rényi divergence*, Period. Math. Hung. **74** (2017), 88–107.

- [33] L. Molnár, *A characterization of central elements in C^* -algebras*, Bull. Austral. Math. Soc. **95** (2017), 138–143.
- [34] O. Hatori and L. Molnár, *Spectral conditions for Jordan $*$ -isomorphisms on operator algebras*, Studia Math. **236** (2017), 101–126.
- [35] L. Molnár, *Maps on the positive definite cone of a C^* -algebra preserving certain quasi-entropies*, J. Math. Anal. Appl. **447** (2017), 206–221.
- [36] L. Molnár, *The logarithmic function and trace zero elements in finite von Neumann factors*, Bull. Austral. Math. Soc. **94** (2016), 290–295.
- [37] L. Molnár and D. Viosztek, *Continuous Jordan triple endomorphisms of \mathbb{P}_2* , J. Math. Anal. Appl. **438** (2016), 828–839.
- [38] L. Molnár and G. Nagy, *Spectral order automorphisms on Hilbert space effects and observables: the 2-dimensional case*, Lett. Math. Phys. **106** (2016), 535–544.
- [39] L. Molnár, J. Pitrik and D. Viosztek, *Maps on positive definite matrices preserving Bregman and Jensen divergences*, Linear Algebra Appl. **495** (2016), 174–189.
- [40] O. Hatori and L. Molnár, *Generalized isometries of the special unitary group*, Arch. Math. **106** (2016), 155–163.
- [41] F. Botelho, L. Molnár and G. Nagy, *Linear bijections on von Neumann factors commuting with λ -Aluthge transform*, Bull. London Math. Soc. **48** (2016), 74–84.
- [42] L. Molnár *Two characterizations of unitary-antiunitary similarity transformations of positive definite operators on a finite dimensional Hilbert space*, Annales Univ. Sci. Budapest., Sect. Comp. (special issue dedicated to Prof. Zoltán Sebestyén on the occasion of his 70th birthday), **58** (2015), 83–93.
- [43] L. Molnár, *General Mazur-Ulam type theorems and some applications*, in Operator Semigroups Meet Complex Analysis, Harmonic Analysis and Mathematical Physics, W. Arendt, R. Chill, Y. Tomilov (Eds.), Operator Theory: Advances and Applications, Vol. 250, pp. 311–342, Birkhäuser, 2015.
- [44] L. Molnár and P. Szokol, *Transformations preserving norms of means of positive operators and nonnegative functions*, Integral Equations Operator Theory **83** (2015), 271–290.

- [45] L. Molnár and D. Viosztek, *On algebraic endomorphisms of the Einstein gyrogroup*, J. Math. Phys. **56** (2015), 082302.
- [46] L. Molnár *On the nonexistence of order isomorphisms between the sets of all self-adjoint and all positive definite operators*, Abstr. Appl. Anal. Volume 2015 (2015), Article ID 434020, 6 pages.
- [47] L. Molnár, P. Šemrl and A.R. Sourour, *Bilocal automorphisms*, Oper. Matrices **9** (2015), 113–120.
- [48] L. Molnár and P. Szokol, *Transformations on positive definite matrices preserving generalized distance measures*, Linear Algebra Appl. **466** (2015), 141–159.
- [49] L. Molnár, *Jordan triple endomorphisms and isometries of spaces of positive definite matrices*, Linear Multilinear Alg. **63** (2015), 12–33.
- [50] L. Molnár and G. Nagy, *Transformations on density operators that leave the Holevo bound invariant*, Int. J. Theor. Phys. **53** (2014), 3273–3278.
- [51] R. Beneduci and L. Molnár, *On the standard K -loop structure of positive invertible elements in a C^* -algebra*, J. Math. Anal. Appl. **420** (2014), 551–562.
- [52] L. Molnár, *A few conditions for a C^* -algebra to be commutative*, Abstr. Appl. Anal. Volume 2014 (2014), Article ID 705836, 4 pages.
- [53] L. Molnár and P. Szokol, *Kolmogorov-Smirnov isometries of the space of generalized distribution functions*, Math. Slovaca **64** (2014), 433–444.
- [54] L. Molnár, *Bilocal $*$ -automorphisms of $B(H)$* , Arch. Math. **102** (2014), 83–89.
- [55] O. Hatori and L. Molnár, *Isometries of the unitary groups and Thompson isometries of the spaces of invertible positive elements in C^* -algebras*, J. Math. Anal. Appl. **409** (2014), 158–167.
- [56] L. Molnár, *Jordan triple endomorphisms and isometries of unitary groups*, Linear Algebra Appl. **439** (2013), 3518–3531.
- [57] F. Botelho, J. Jamison and L. Molnár, *Surjective isometries on Grassmann spaces*, J. Funct. Anal. **265** (2013), 2226–2238.
- [58] F. Botelho, J. Jamison and L. Molnár, *Algebraic reflexivity of isometry groups and automorphism groups of some operator structures*, J. Math. Anal. Appl. **408** (2013), 177–195.

- [59] L. Molnár, G. Nagy and P. Szokol, *Maps on density operators preserving quantum f -divergences*, Quantum Inf. Process. **12** (2013), 2309–2323.
- [60] G. Dolinar and L. Molnár, *Automorphisms for the logarithmic product of positive semidefinite operators*, Linear Multilinear Algebra **61** (2013), 161–169.
- [61] O. Hatori, G. Hirasawa, T. Miura and L. Molnár, *Isometries and maps compatible with inverted Jordan triple products on groups*, Tokyo J. Math. **35** (2012), 385–410.
- [62] O. Hatori and L. Molnár, *Isometries of the unitary group*, Proc. Amer. Math. Soc. **140** (2012), 2141–2154. MR2888199, Zbl. 1244.47032
- [63] G. Dolinar and L. Molnár, *Sequential endomorphisms of finite dimensional Hilbert space effect algebras*, J. Phys. A: Math. Theor. **45** (2012) 065207. MR2881058, Zbl. 1235.81008
- [64] L. Molnár and P. Šemrl, *Transformations of the unitary group on a Hilbert space*, J. Math. Anal. Appl. **388** (2012), 1205–1217. MR2869819, Zbl. 06009629
- [65] L. Molnár and G. Nagy, *Isometries and relative entropy preserving maps on density operators*, Linear Multilinear Algebra **60** (2012), 93–108. MR2869675, Zbl 1241.47034
- [66] L. Molnár, *Maps preserving general means of positive operators*, Electron. J. Linear Algebra **22** (2011), 864–874. MR2836790, Zbl. 06098828
- [67] L. Molnár, *Continuous maps on matrices transforming geometric mean to arithmetic mean*, Annales Univ. Sci. Budapest., Sect. Comp. (special issue dedicated to Prof. Antal Járαι on the occasion of his 60th birthday) **35** (2011), 217–222. MR?? Zbl. 1229.47055
- [68] L. Molnár and W. Timmermann, *Transformations on bounded observables preserving measure of compatibility*, Int. J. Theor. Phys. **50** (2011), 3857–3863. MR2860043, Zbl. 1243.81079
- [69] L. Molnár, *Kolmogorov-Smirnov isometries and affine automorphisms of spaces of distribution functions*, Cent. Eur. J. Math. **9** (2011), 789–796. MR2805312, Zbl. 1239.46022
- [70] L. Molnár, *Lévy isometries of the space of probability distribution functions*, J. Math. Anal. Appl. **380** (2011), 847–852. MR2794437, Zbl. 1229.46019

- [71] L. Molnár, *Order automorphisms on positive definite operators and a few applications*, Linear Algebra Appl. **434** (2011), 2158–2169. MR2781684, Zbl. 1220.47051
- [72] L. Molnár and P. Szokol, *Maps on states preserving the relative entropy II*, Linear Algebra Appl. **432** (2010), 3343–3350. MR2011b:47087, Zbl. 1187.47030
- [73] L. Molnár and G. Nagy, *Thompson isometries on positive operators: the 2-dimensional case*, Electron. J. Lin. Alg. **20** (2010), 79–89. MR2596446, Zbl. 1195.46017
- [74] L. Molnár, *Linear maps on observables in von Neumann algebras preserving the maximal deviation*, J. London Math. Soc. **81** (2010), 161–174. MR 2010m:46100, Zbl. 1189.47036
- [75] L. Molnár, *Thompson isometries of the space of invertible positive operators*, Proc. Amer. Math. Soc. **137** (2009), 3849–3859. MR 2010h:47058, Zbl. 1184.46021
- [76] L. Molnár, *Maps preserving the harmonic mean or the parallel sum of positive operators*, Linear Algebra Appl. **430** (2009), 3058–3065. MR 2010e:47077, Zbl. 1182.47035
- [77] L. Molnár, *Maps on positive operators preserving Lebesgue decompositions*, Electron. J. Linear Algebra **18** (2009), 222–232. MR 2010i:47079, Zbl. 1181.47040
- [78] L. Molnár and W. Timmermann, *A metric on the space of projections admitting nice isometries*, Studia Math. **191** (2009), 271–281. MR 2009m:47097, Zbl. 1168.47030
- [79] L. Molnár, *Maps preserving the geometric mean of positive operators*, Proc. Amer. Math. Soc. **137** (2009), 1763–1770. MR 2009m:47096, Zbl. 1183.47032
- [80] L. Molnár and W. Timmermann, *Maps on quantum states preserving the Jensen-Shannon divergence*, J. Phys. A: Math. Theor. **42** (2009), 015301. MR 2010f:81033, Zbl. 1156.81349
- [81] L. Molnár, *Linear maps on matrices preserving commutativity up to a factor*, Linear Multilinear Algebra **57** (2009), 13–18. MR 2010i:15003, Zbl. 1160.15004
- [82] G. Dolinar and L. Molnár, *Isometries of the space of distribution functions with respect to the Kolmogorov-Smirnov metric*, J. Math. Anal. Appl., **348** (2008), 494–498. MR 2009j:47063, Zbl. 1162.46305

- [83] L. Molnár, *Maps on the n -dimensional subspaces of a Hilbert space preserving principal angles*, Proc. Amer. Math. Soc. **136** (2008), 3205–3209. MR 2009f:47056, Zbl. 1143.47025
- [84] L. Molnár, *Maps on states preserving the relative entropy*, J. Math. Phys. **49** (2008), 032114. MR 2009c:81025, Zbl. 1153.81407
- [85] L. Molnár, *Isometries of the spaces of bounded frame functions*, J. Math. Anal. Appl. **338** (2008), 710–715. MR 2009d:47038, Zbl. 1135.47034
- [86] G. Dolinar and L. Molnár, *Maps on quantum observables preserving the Gudder order*, Rep. Math. Phys. **60** (2007), 159–166. MR 2008m:81008, Zbl. 1131.81010
- [87] L. Molnár and P. Šemrl, *Spectral order automorphisms of the spaces of Hilbert space effects and observables*, Lett. Math. Phys. **80** (2007), 239–255. MR 2008f:47118, Zbl. 1138.47057
- [88] L. Molnár and W. Timmermann, *Mixture preserving maps on von Neumann algebra effects*, Lett. Math. Phys. **79** (2007), 295–302. MR 2008b:46084, Zbl. 1130.46037
- [89] L. Molnár and P. Šemrl, *Elementary operators on self-adjoint operators*, J. Math. Anal. Appl. **327** (2007), 302–309. MR 2007g:47052, Zbl. 1117.47024
- [90] L. Molnár, *Multiplicative Jordan triple isomorphisms on the self-adjoint elements of von Neumann algebras*, Linear Algebra Appl. **419** (2006), 586–600. MR 2007k:47059, Zbl. 1115.47034
- [91] L. Molnár, *Non-linear Jordan triple automorphisms of sets of self-adjoint matrices and operators*, Studia Math. **173** (2006), 39–48. MR 2006j:47059, Zbl. 1236.47031
- [92] L. Molnár and W. Timmermann, *Transformations on the sets of states and density operators*, Linear Algebra Appl. **418** (2006), 75–84. MR 2007g:81014, Zbl. 1113.47023
- [93] L. Molnár, *A remark to the Kochen-Specker theorem and some characterizations of the determinant on sets of Hermitian matrices*, Proc. Amer. Math. Soc. **134** (2006) 2839–2848. MR 2007b:81018, Zbl. 1094.15010
- [94] L. Molnár and P. Šemrl, *Non-linear commutativity preserving maps on self-adjoint operators*, Quart. J. Math. **56** (2005), 589–595. MR 2006m:47063, Zbl. 1211.47075

- [95] E. Kovács and L. Molnár, *Preserving some numerical correspondences between Hilbert space effects*, Rep. Math. Phys. **54** (2004), 201–209. MR 2005m:47077, Zbl. 1100.47032
- [MDiss] L. Molnár, *Preserver Problems on Algebraic Structures of Linear Operators and on Function Spaces*, Dissertation for the D.Sc. degree of the Hungarian Academy of Sciences, 241 pages.
- [96] L. Molnár, *Sequential isomorphisms between the sets of von Neumann algebra effects*, Acta Sci. Math. (Szeged) **69** (2003), 755–772. MR 2005d:46128, Zbl. 1049.46048
- [97] L. Molnár and E. Kovács, *An extension of a characterization of the automorphisms of Hilbert space effect algebras*, Rep. Math. Phys. **52** (2003), 141–149. MR 2004i:81015, Zbl. 1052.81007
- [98] L. Molnár and M. Barczy, *Linear maps on the space of all bounded observables preserving maximal deviation*, J. Funct. Anal. **205** (2003), 380–400. MR 2004j:47074, Zbl. 1047.47029
- [99] L. Molnár, *Preservers on Hilbert space effects*, Linear Algebra Appl. **370** (2003), 287–300. MR 2004g:81022, Zbl. 1040.47028
- [100] L. Molnár and W. Timmermann, *Preserving the measure of compatibility between quantum states*, J. Math. Phys. **44** (2003), 969–973. MR 2004:81010, Zbl. 1061.81001
- [101] L. Molnár and W. Timmermann, *Isometries of quantum states*, J. Phys. A: Math. Gen. **36** (2003), 267–273. MR 2004a:81046, Zbl. 1047.81017
- [102] L. Molnár, *Local automorphisms of operator algebras on Banach spaces*, Proc. Amer. Math. Soc. **131** (2003), 1867–1874. MR 2003j:47050, Zbl. 1043.47030
- [103] L. Molnár and P. Šemrl, *Elementary operators on standard operator algebras*, Linear and Multilinear Algebra **50** (2002), 315–319. MR 2003g:47067, Zbl. 1033.47026
- [104] L. Molnár, *Orthogonality preserving transformations on indefinite inner product spaces: generalization of Uhlhorn’s version of Wigner’s theorem*, J. Funct. Anal., **194** (2002), 248–262. MR 2003h:47069, Zbl. 1010.46023
- [105] F. Cabello Sánchez and L. Molnár, *Reflexivity of the isometry group of some classical spaces*, Rev. Mat. Iberoam. **18** (2002), 409–430. MR 2003j:47046, Zbl. 1050.47028

- [106] L. Molnár, *2-local isometries of some operator algebras*, Proc. Edinb. Math. Soc. **45** (2002), 349–352. MR 2003e:47067, Zbl. 1027.46062
- [107] L. Molnár, *Conditionally multiplicative maps on the set of all bounded observables preserving compatibility*, Linear Algebra Appl. **349** (2002), 197–201. MR 2003c:47070, Zbl. 998.81002
- [108] L. Molnár, *On certain automorphisms of sets of partial isometries*, Arch. Math. **78** (2002), 43–50. MR 2002k:47078, Zbl. 1037.47025
- [109] L. Molnár, *Some characterizations of the automorphisms of $B(H)$ and $C(X)$* , Proc. Amer. Math. Soc. **130** (2002), 111–120. MR 2002m:47047, Zbl. 983.47024
- [110] L. Molnár, *Jordan maps on standard operator algebras*, Functional Equations – Results and Advances, in Z. Daróczy and Zs. Páles (eds.), Advances in Mathematics, vol 3., Kluwer Acad. Publ., Dordrecht, 2001, pp. 305–320. MR 2003e:47068, Zbl. 1004.46044
- [111] L. Molnár, *On some functional equations on operator algebras*, in Hungarian, Assembly Lectures, May 2000, vol. II, Hungarian Academy of Sciences, Budapest, 2001, pp. 457–464.
- [112] L. Molnár, *Local automorphisms of some quantum mechanical structures*, Lett. Math. Phys. **58** (2001), 91–100. MR 2002k:47077, Zbl. 1002.46044
- [113] L. Molnár, *Fidelity preserving maps on density operators*, Rep. Math. Phys. **48** (2001), 299–303. MR 2003a:81081, Zbl. 1002.46044
- [114] L. Molnár, *Order-automorphisms of the set of bounded observables*, J. Math. Phys. **42** (2001), 5904–5909. MR 2002m:81012, Zbl. 1019.81005
- [115] L. Molnár, **-semigroup endomorphisms of $B(H)$* , in I. Gohberg et al. (Edt.), Operator Theory: Advances and Applications, Vol. 127, pp. 465–472, Birkhäuser, 2001. MR1902817, Zbl. 991.47019
- [116] L. Molnár, *Characterizations of the automorphisms of Hilbert space effect algebras*, Commun. Math. Phys. **223** (2001), 437–450. MR 2003a:81013, Zbl. 1029.81008
- [117] L. Molnár and Zs. Páles, *\perp -order automorphisms of Hilbert space effect algebras: The two-dimensional case*, J. Math. Phys. **42** (2001), 1907–1912. MR 2001m:47141, Zbl. 1025.47045

- [118] L. Molnár, *Transformations on the set of all n -dimensional subspaces of a Hilbert space preserving principal angles*, Commun. Math. Phys. **217** (2001), 409–421. MR 2002b:81008, Zbl. 1026.81006
- [119] L. Molnár, *A reflexivity problem concerning the C^* -algebra $C(X) \otimes B(H)$* , Proc. Amer. Math. Soc. **129** (2001), 531–537. MR 2001e:46101, Zbl. 959.47022
- [120] L. Molnár, *A Wigner-type theorem on symmetry transformations in Banach spaces*, Publ. Math. (Debrecen) **58** (2000), 231–239. MR 2001j:47092, Zbl. 973.47058
- [121] M. Brešar, L. Molnár and P. Šemrl, *Elementary operators II*, Acta Sci. Math. (Szeged) **66** (2000), 769–791. MR 2002h:47053, Zbl. 973.47028
- [122] L. Molnár, *On isomorphisms of standard operator algebras*, Studia Math. **142** (2000), 295–302. MR 2001g:47124, Zbl. 1049.47503
- [123] L. Molnár, *A Wigner-type theorem on symmetry transformations in type II factors*, Int. J. Theor. Phys. **39** (2000), 1463–1466. MR 2001i:46098, Zbl. 1090.46510
- [124] L. Molnár, *On some automorphisms of the set of effects on Hilbert space*, Lett. Math. Phys. **51** (2000), 37–45. MR 2001g:81109, Zbl. 1072.81535
- [125] L. Molnár and P. Šemrl, *Local automorphisms of the unitary group and the general linear group on a Hilbert space*, Expo. Math. **18** (2000), 231–238. MR 2001a:47083, Zbl. 963.46044
- [126] L. Molnár, *Generalization of Wigner’s unitary-antiunitary theorem for indefinite inner product spaces*, Commun. Math. Phys. **210** (2000), 785–791. MR 2001g:47064, Zbl. 957.46106
- [127] L. Molnár, *Reflexivity of the automorphism and isometry groups of C^* -algebras in BDF theory*, Arch. Math. **74** (2000), 120–128. MR 2001k:47049, Zbl. 1023.47021
- [128] L. Molnár, *Automatic surjectivity of ring homomorphisms on H^* -algebras and algebraic differences among some group algebras of compact groups*, Proc. Amer. Math. Soc. **128** (2000), 125–134. MR 2000c:46103, Zbl. 945.46034
- [129] L. Molnár and B. Zalar, *On local automorphism of group algebras of compact groups*, Proc. Amer. Math. Soc. **128** (2000), 93–99. MR 2000f:43002, Zbl. 930.43002

- [130] L. Molnár, *Multiplicative maps on ideals of operators which are local automorphisms*, Acta Sci. Math. (Szeged) **65** (1999), 727–736. MR 2000k:47045, Zbl. 993.47031
- [131] L. Molnár, *Some multiplicative preservers on $B(H)$* , Linear Algebra Appl. **301** (1999), 1–13. MR 2000h:47060, Zbl. 974.47031
- [132] L. Molnár, *A generalization of Wigner’s unitary-antiunitary theorem to Hilbert modules*, J. Math. Phys. **40** (1999), 5544–5554. MR 2000j:46112, Zbl. 953.46030
- [133] L. Molnár and B. Zalar, *Reflexivity of the group of surjective isometries on some Banach spaces*, Proc. Edinb. Math. Soc. **42** (1999), 17–36. MR 2000b:47094, Zbl. 930.47015
- [134] L. Molnár, *Some linear preserver problems on $B(H)$ concerning rank and corank*, Linear Algebra Appl. **286** (1999), 311–321. MR 2000b:47089, Zbl. 963.47028
- [135] L. Molnár, *An algebraic approach to Wigner’s unitary-antiunitary theorem*, J. Austral. Math. Soc. **65** (1998), 354–369. MR 99k:46031, Zbl. 943.46033
- [136] L. Molnár and P. Šemrl, *Some linear preserver problems on upper triangular matrices*, Linear and Multilinear Algebra **45** (1998), 189–206. MR 99h:15003, Zbl. 974.15001
- [137] V. Mascioni and L. Molnár, *Linear maps on factors which preserve the extreme points of the unit ball*, Canad. Math. Bull. **41** (1998), 434–441. MR 99m:46145, Zbl. 919.47024
- [138] L. Molnár, *The automorphism and isometry groups of $\ell_\infty(\mathbb{N}, \mathcal{B}(\mathcal{H}))$ are topologically reflexive*, Acta Sci. Math. (Szeged) **64** (1998), 671–680. MR 99k:47083, Zbl. 937.47039
- [139] L. Molnár and M. Györy, *Reflexivity of the automorphism and isometry groups of the suspension of $\mathcal{B}(\mathcal{H})$* , J. Funct. Anal. **159** (1998), 568–586. MR 2000h:47110, Zbl. 933.46064
- [140] M. Györy and L. Molnár, *Diameter preserving linear bijections of $C(X)$* , Arch. Math. **71** (1998), 301–310. MR 99h:46098, Zbl. 928.46034
- [141] M. Györy, L. Molnár and P. Šemrl, *Linear rank and corank preserving maps on $\mathcal{B}(H)$ and an application to $*$ -semigroup isomorphisms of operator ideals*, Linear Algebra Appl. **280** (1998), 253–266. MR 2000k:47044, Zbl. 940.46012

- [142] L. Molnár, *Stability of the surjectivity of Jordan *-homomorphisms of $\mathcal{B}(H)$* , J. Nat. Geom. **14** (1998), 149–154. MR 99g:46102, Zbl. 932.46040
- [143] L. Molnár, *Characterization of additive *-homomorphisms and Jordan *-homomorphisms on operator ideals*, Aequationes Math. **55** (1998), 259–272. MR: 99m:47042, Zbl. 912.47017
- [144] L. Molnár, *A proper standard C^* -algebra whose automorphism and isometry groups are topologically reflexive*, Publ. Math. (Debrecen) **52** (1998), 563–574. MR 99e:46082, Zbl. 918.46055
- [145] L. Molnár, *Stability of the surjectivity of endomorphisms and isometries of $\mathcal{B}(H)$* , Proc. Amer. Math. Soc. **126** (1998), 853–861. MR 98e:47055, Zbl. 890.47022
- [146] L. Molnár and P. Šemrl, *Order isomorphisms and triple isomorphisms of operator ideals and their reflexivity*, Arch. Math. **69** (1997), 497–506. MR 99a:47054, Zbl. 910.47027
- [147] L. Molnár, *Jordan *-derivation pairs on a complex *-algebra*, Aequationes Math. **54** (1997), 44–55. MR 98j:46053, Zbl. 887.16021
- [148] L. Molnár and B. Zalar, *Three-variable *-identities and homomorphisms of Schatten classes*, Publ. Math. (Debrecen) **50** (1997), 121–133. MR 98h:46054, Zbl. 880.46042
- [149] L. Molnár, *The set of automorphisms of $B(H)$ is topologically reflexive in $B(B(H))$* , Studia Math. **122** (1997), 183–193. MR 98e:47068, Zbl. 871.47030
- [150] L. Molnár and P. Šemrl, *Local Jordan *-derivations of standard operator algebras*, Proc. Amer. Math. Soc. **125** (1997), 447–454. MR 97d:47038, Zbl. 861.47020
- [151] L. Molnár, *On rings of differentiable functions*, Grazer Math. Ber. **327** (1996), 13–16. MR 98e:46035, Zbl. 887.46009
- [152] L. Molnár, *Bijectivity of *-endomorphisms of $\mathcal{B}(H)$ and the unilateral shift*, Monatsh. Math. **122** (1996), 377–387. MR 97m:47047, Zbl. 862.46032
- [153] C.J.K. Batty and L. Molnár, *On topological reflexivity of the groups of *-automorphisms and surjective isometries of $\mathcal{B}(H)$* , Arch. Math. **67** (1996), 415–421. MR 97f:47034, Zbl. 866.47027
- [154] L. Molnár, *The range of a Jordan *-derivation*, Math. Japon. **44** (1996), 353–356. MR 97m:47046, Zbl. 886.47019

- [155] L. Molnár, *The range of a Jordan $*$ -derivation on an H^* -algebra*, Acta Math. Hung. **72** (1996), 261–267. MR 98g:46078, Zbl. 902.46027
- [156] L. Molnár, *Wigner's unitary-antiunitary theorem via Herstein's theorem on Jordan homomorphisms*, J. Nat. Geom. **10** (1996), 137–148. MR 97i:46038, Zbl. 858.46019
- [157] L. Molnár, *Two characterizations of additive $*$ -automorphisms of $\mathcal{B}(H)$* , Bull. Austral. Math. Soc. **53** (1996), 391–400. MR 97c:47042, Zbl. 879.46030
- [158] L. Molnár, *The range of a ring homomorphism from a commutative C^* -algebra*, Proc. Amer. Math. Soc. **124** (1996), 1789–1794. MR 96h:46090, Zbl. 857.46032
- [159] L. Molnár, *Locally inner derivations of standard operator algebras*, Math. Bohem. **121** (1996), 1–7. MR 97i:47069, Zbl. 863.46039
- [160] L. Molnár, *Algebraic difference between p -classes of an H^* -algebra*, Proc. Amer. Math. Soc. **124** (1996), 169–175. MR 96d:46072, Zbl. 840.46035
- [161] L. Molnár, *A condition for a subspace of $\mathcal{B}(H)$ to be an ideal*, Linear Algebra Appl. **235** (1996), 229–234. MR 96m:47092, Zbl. 852.46021
- [162] L. Molnár and B. Zalar, *On automatic surjectivity of Jordan homomorphisms*, Acta Sci. Math. (Szeged) **61** (1995), 413–424. MR 97a:46097, Zbl. 842.46046
- [163] L. Molnár, *On centralizers of an H^* -algebra*, Publ. Math. (Debrecen) **46** (1995), 89–95. MR 96a:46102, Zbl. 860.46037
- [164] L. Molnár, *Conditions for a function to be a centralizer on an H^* -algebra*, Acta Math. Hung. **67** (1995), 171–174. MR 96b:46074, Zbl. 888.46037
- [165] L. Molnár, *On the range of a normal Jordan $*$ -derivation*, Comment. Math. Univ. Carolinae **35** (1994), 691–695. MR 95k:47054, Zbl. 821.47028
- [166] L. Molnár, *A condition for a function to be a bounded linear operator*, Indian J. Math. **35** (1993), 1–4. MR 94k:47061, Zbl. 811.47032
- [167] L. Molnár, *p -classes of an H^* -algebra and their representations*, Acta Sci. Math. (Szeged) **58** (1993), 411–423. MR 95c:46081, Zbl. 811.46056

- [168] L. Molnár, *On A -linear operators on a Hilbert A -module*, *Period. Math. Hung.* **26** (1993), 219–222. MR 94i:46062, Zbl. 816.46042
- [169] L. Molnár, *On Saworotnow's Hilbert A -modules*, *Glasnik Mat.* **28** (1993), 259–267. MR 95m:46076, Zbl. 818.46056
- [170] L. Molnár, *Modular bases in a Hilbert A -module*, *Czech. Math. J.* **42** (1992), 649–656. MR 93i:46095, Zbl. 809.46039
- [171] L. Molnár, *$*$ -representations of the trace-class of an H^* -algebra*, *Proc. Amer. Math. Soc.* **115** (1992), 167–170. MR 92i:46064, Zbl. 789.46044
- [172] L. Molnár, *A note on the strong Schwarz inequality in Hilbert A -modules*, *Publ. Math. (Debrecen)* **40** (1992), 323–325. MR 93i:46094, Zbl. 804.46056
- [173] L. Molnár, *A note on Saworotnow's representation theorem on positive definite functions*, *Houston J. Math.* **17** (1991), 89–99. MR 92j:46097, Zbl. 780.46035
- [174] L. Molnár, *Reproducing kernel Hilbert A -modules*, *Glasnik Mat.* **25** (1990), 335–345. MR 94k:46103, Zbl. 773.46026
- [175] Y. Kakihara and L. Molnár, *A remark on HS operator valued $c.a.g.o.s.$ measures*, *Res. Act. Fac. Sci. Engrg. Tokyo Denki Univ.* **12** (1990), 13–19. MR 91h:46082
- [176] L. Molnár, *Two applications of the theory of weakly stationary stochastic processes to harmonic analysis*, *Glasnik Mat.* **25** (1990), 209–219. MR 92h:60055, Zbl. 825.60027

CITATIONS

In the Hungarian Scientific Bibliography (unfortunately, never up-to-date):

<https://m2.mtmt.hu/gui2/?type=authors&mode=browse&sel=10000799>

On MathSciNet:

<https://mathscinet.ams.org/mathscinet/author?authorId=292494>

In Google Scholar Citations:

<https://scholar.google.hu/citations?user=SwE6jBcAAAAJ&hl=en>

LECTURES AND TALKS

by Lajos Molnár

1. *Relative entropy preserving maps on positive cones in operator algebras*, School of Mathematics and Statistics, Beijing Institute of Technology (BIT), December 4, 2024, Beijing, China.
2. *Preservers of operator means on C^* -algebras*, Tianyuan Mathematical Center in Southeast China, Xiamen University, November 14, 2024, Xiamen, China.
3. *Maps on positive cones in operator algebras preserving relative entropies*, Workshop on Function Spaces and Operator Theory, Hebei University of Technology, October 25-27, 2024, Tianjin, China.
4. *Characterizations of Jordan $*$ -isomorphisms between C^* -algebras by relative entropy preserving maps*, 35th International Workshop on Operator Theory and its Applications, IWOTA 2024, University of Kent, August 12-16, 2024, Canterbury, UK.
5. *Preservers of operator means*, Operator Theory 29, July 1-5, 2024, Timisoara, Romania.
6. *Order isomorphisms between positive definite cones in C^* -algebras and their applications*, From Classical to Modern Analysis: In memory of Professor José Carlos Petronilho, June 24-28, 2024, Sanlúcar de Barrameda, Spain.
7. *Transformations of structures on positive definite cones in C^* -algebras*, East China University of Science and Technology, Department of Mathematics, June 5, 2024, Shanghai, China.
8. *On a parametric family of distance measures that includes the Hellinger and the Bures distances*, School of Mathematical Sciences, Qufu Normal University, June 2, 2024, Qufu, China.
9. *Transformations of structures on positive definite cones in C^* -algebras*, Chinese Academy of Sciences, Academy of Mathematics and Systems Science, May 24, 2024, Beijing, China.
10. *Algebraic properties of operations on positive definite cones in operator algebras corresponding to various versions of Heron means*, School of Mathematical Sciences, Nankai University, May 13, 2024, Tianjin, China.
11. *Characterizations of the centrality of positive definite elements in C^* -algebras*, School of Mathematical Sciences, Nankai University, May 11, 2024, Tianjin, China.

12. *Characterizations of the centrality of positive definite elements in C^* -algebras*, Sun Yat-Sen University, Department of Applied Mathematics, May 2, 2024, Kaohsiung, Taiwan.
13. *Transformations of structures on positive definite cones in C^* -algebras*, National Chung Hsing University, Department of Applied Mathematics, April 29, 2024, Taichung, Taiwan.
14. *On a parametric family of distance measures that includes the Hellinger and the Bures distances*, Department of Mathematics, Faculty of Electrical Engineering, Czech Technical University in Prague, March 21, 2024, Prague, Czech Republic.
15. *Order isomorphisms between positive definite cones in C^* -algebras and their applications*, Institut für Analysis, Technische Universität Dresden, March 18, 2024, Dresden, Germany.
16. *On a parametric family of distance measures that includes the Hellinger and the Bures distances*, University of Ljubljana October 26, 2023, Ljubljana, Slovenia.
17. *Some new characterizations of the centrality of positive definite elements in C^* -algebras*, University of Cádiz, September 21, 2023, Cádiz, Spain.
18. *Some new characterizations of the centrality of positive definite elements in C^* -algebras*, The 6th Niigata Seminar, Department of Mathematics, Faculty of Science, Niigata University, 17 August, 2023, Niigata, Japan.
19. *Isomorphisms of positive definite cones of C^* -algebras with respect to variants of power means*, 59th ISFE, June 18-25, 2023, Hajdúszoboszló, Hungary.
20. *Algebraic properties of operations on positive definite cones in operator algebras corresponding to various versions of Heron means*, ILAS 2023, Universidad Politécnica de Madrid, June 12-16, 2023, Madrid, Spain.
21. *Transformations of structures on positive definite cones in C^* -algebras*, Operator Theory Days, conference in honor of Mostafa Mbekhta, University of Lille, May 24-25, 2023, Lille, France.
22. *Transformations of structures on positive definite cones in C^* -algebras*, Seminar of the Department of Mathematics, Kuwait University, April 12, 2023, Kuwait, online talk.
23. *Algebraic properties of some operations on the positive cone in a C^* -algebra*, University of Almeria, February 17, 2023, Almeria, Spain.

24. *Order isomorphisms between positive definite cones in C^* -algebras and their applications*, University of Granada, February 15, 2023, Granada, Spain.
25. *Order isomorphisms between positive definite cones in C^* -algebras and their applications*, Université Mohammed V de Rabat Faculté des Sciences, November 28, 2022, Rabat, Morocco.
26. *Transformations of structures on positive definite cones in C^* -algebras*, 1st International Days of Complex and Functional Analysis and Spectral Theory, 16th National Meeting of the Network of Spectral Theory and Applications, November 24-26, 2022, El Jadida, Morocco.
27. *Preservers on positive definite cones in operator algebras*, Journées Internationales d'Analyse Fonctionnelle, Université Ibn Tofail, Faculté des sciences, November 22-23, 2022, Kenitra, Morocco.
28. *Symmetries of structures of positive (semi)definite matrices*, Journées Internationales d'Analyse Fonctionnelle, Université Ibn Tofail, Faculté des sciences, November 22-23, 2022, Kenitra, Morocco.
29. *Transformations on positive cones in operator algebras preserving means*, Journées Internationales d'Analyse, Université Sidi Mohamed Ben Abdellah de Fès, 19-21 November, 2022, Fès, Morocco.
30. *Isometries and mean preserving maps on matrix algebras and operator algebras*, Journées Analyse Fonctionnelle & Applications, University Mohammed Premier Oujda, 16-17 Novembre 2022, Oujda, Morocco.
31. *Order isomorphisms between positive definite cones in C^* -algebras and their applications*, Webinar at the School of Mathematical Sciences, Nankai University October 26, 2022, Tianjin, China.
32. *Preserver problems: an introduction* Webinar at the School of Mathematical Sciences, Nankai University October 26, 2022, Tianjin, China.
33. *Isomorphisms of positive definite cones of C^* -algebras with respect to some operator means*, 33th International Workshop on Operator Theory and its Applications, IWOTA 2022, September 6-10, 2022, Kraków, Poland.
34. *Order isomorphisms between positive definite cones in C^* -algebras and their applications*, Operators on Banach algebras and related topics, 16-17 July, 2022, Tarbiat Modares University, Iran.
35. *Transformations of structures on positive definite cones in C^* -algebras*, Operator Theory 28, June 27 - July 1, 2022, Timisoara.

36. *Preservers related to the geometric mean and its variants*, 24th Conference of the International Linear Algebra Society, National University of Ireland, June 20-24, 2022, Galway, Ireland.
37. *Order isomorphisms between positive definite cones in C^* -algebras and their applications*, University of Malta, May 17, 2022, Malta.
38. *Applications of the automatic additivity of positive homogeneous order isomorphisms between positive definite cones in C^* -algebras*, Rényi Institute of Mathematics, April 28, 2022, Budapest, Hungary.
39. *On the order determining property of the norm of a Kubo-Ando mean in operator algebras*, (online) Research on preserver problems on Banach algebras and related topics, RIMS Kyoto October 25-27 October, 2021, Kyoto, Japan.
40. *Transformations of structures on positive definite cones in C^* -algebras*, (online) Mini-course and Workshop on Operators on Function Spaces, The Fields Institute, October 12-15, 2021, Toronto, Canada.
41. *On the order determining property of the norm of a Kubo-Ando mean in operator algebras*, (online) 19th ICFEI (International Conference on Functional Equations and Inequalities), September 12-18, 2021, Bedlewo, Poland.
42. *Maps on positive definite cones of C^* -algebras preserving the Wasserstein mean*, (online) 8ECM, MS 'Recent Developments on Preservers', 20-26 June, 2021, Portorož, Slovenia.
43. *Isometries and mean preserving maps on matrix algebras and operator algebras*, (online) Kerékjártó Seminar, University of Szeged, February 11, 2021, Szeged, Hungary.
44. *Symmetries of structures on positive definite cones in C^* -algebras*, (online) The 6th Seminar on Functional Analysis and its Applications, University of Isfahan, January 27-28, 2021, Isfahan, Iran.
45. *Symmetries of structures on positive definite cones in C^* -algebras*, (online) IST Austria, December 1, 2020, Klosterneuburg, Austria.
46. *Transformations on positive cones in operator algebras preserving means*, (online) Functions and Operators, 10 years after, July 15-17, 2020, Jagiellonian University, Kraków, Poland.
47. *On means and their preservers*, (online) Preserver Webinar, June 5, 2020.
48. *Symmetries of structures on positive definite cones in C^* -algebras*, International Conference on Analysis, Algebra, Combinatorics and

- their Applications (ICAACA-2020), Jadavpur University, 20-22 January 2020, Kolkata, India.
49. *Quantum structures from the operator theoretical view and their symmetries*, Indian Institute of Information Technology, Allahabad, January 13, 2020, Allahabad, India.
 50. *Characterizations of certain means of positive operators*, Workshop on Banach space theory and preservers, October 11-14, 2019, Nankai University, Tianjin, China.
 51. *Isometries of positive definite cones in C^* -algebras*, Nankai University, Chern Institute of Mathematics, October 11, 2019, Tianjin, China.
 52. *Maps preserving means on positive definite or positive semidefinite cones in operator algebras*, Qufu University, Department of Mathematics, October 5, 2019, Qufu, China.
 53. *Symmetries of structures of positive (semi)definite matrices*, University of Primorska, Department of Mathematics, September 4, 2019, Koper, Slovenia.
 54. *Preservers on positive definite cones in operator algebras*, Workshop on Harmonic Analysis and Operator Theory, WHO19, Istanbul University, August 26-29, 2019, Istanbul, Turkey
 55. *Maps preserving means on positive definite or positive semidefinite cones in operator algebras*, IWOTA 2019, Instituto Superior Técnico Lisbon, July 22-26, 2019, Lisbon, Portugal.
 56. *Isometries of positive definite cones in C^* -algebras*, IWOTA 2019, Instituto Superior Técnico Lisbon, July 22-26, 2019, Lisbon, Portugal.
 57. *Bures isometries between density spaces of C^* -algebras*, ILAS Rio 2019, July 08-12, 2019, Rio de Janeiro, Brazil.
 58. *Isomorphisms and isometries, two important types of preservers*, Department of Mathematics, University of Malta, June 21, 2019, Msida, Malta.
 59. *Symmetries of structures of positive (semi)definite elements in C^* -algebras*, Advances in the Geometric and Analytic Theory of Convex Cones, May 27-31, 2019, Jeju, Korea.
 60. *Symmetries of structures of positive (semi)definite matrices*, 2019 International Conference on Matrix Theory with Applications, May 23-27, 2019, Jeju, Korea.

61. *Isometries and isomorphisms of matrix structures*, Department of Applied Mathematics, The Hong Kong Polytechnic University, March 29, 2019, Hong Kong.
62. *Some nonlinear preservers on positive definite matrices*, School of Mathematical Science, Huaqiao University, March 21, 2019, Quanzhou, China.
63. *Transformations on mathematical structures, preservers*, School of Mathematical Science, Huaqiao University, March 19, 2019, Quanzhou, China.
64. *Isometries and isomorphisms*, Colloquium talk, Department of Applied Mathematics, National Sun Yat-Sen University, March 14, 2019, Kaohsiung, Taiwan.
65. *Thompson isometries on positive definite cones in C^* -algebras and their applications*, Seminar talk, University of Zagreb, February 1, 2019, Zagreb, Croatia.
66. *Isometries and isomorphisms*, Colloquium talk, University of Zagreb, January 30, 2019, Zagreb, Croatia.
67. *Isometries and isomorphisms*, Seminar talk, University of Valencia, January 10, 2019, Valencia, Spain.
68. *Thompson isometries on positive definite cones in C^* -algebras and their applications*, '2018' IMAC AHA Days, Universitat Jaume I, Castellón, January 8-9, 2019, Castellón, Spain.
69. *Thompson isometries and applications*, Recent Advances in Operator Theory and Operator Algebras (OTOA) 2018, ISI Bangalore, December 13-19, 2018, Bangalore, India.
70. *Bures-Wasserstein isometries of positive definite cones in C^* -algebras*, ISI Delhi, December 12, 2018, Delhi, India.
71. *Quantum Rényi relative entropies: their symmetries and their essential differences*, International Workshop on Operator Theory and Applications 2018 (IWOTA2018), East China Normal University, July 23-27, 2018, Shanghai, China.
72. *Strength functions: a strange function space associated to the positive semidefinite cone of Hilbert space operators*, 2018 International Workshop on Matrices and Operators (MAO2018), Shanghai University, July 15-18, 2018, Shanghai, China.

73. *Jordan isomorphisms as preservers*, International Conference on Algebra and Related Topics (ICART 2018), Faculty of Sciences, Mohammed V University, July 2-5, 2018, Rabat, Morocco.
74. *Thompson isometries and applications*, Preservers: Modern Aspects and New Directions, Queen's University Belfast, June 18-21, 2018, Belfast, UK.
75. *Isometries and isomorphisms*, Colloquium talk, University of Ljubljana, May 17, 2018, Ljubljana, Slovenia.
76. *Strength functions: a strange function space associated to the positive semidefinite cone of Hilbert space operators*, Seminar talk, University of Almeria, April 27, 2018, Almeria, Spain.
77. *Bures isometries between density spaces of C^* -algebras and some related maps*, Seminar talk, University of Granada, April 26, 2018, Granada, Spain.
78. *Jordan isomorphisms as preservers*, Operator Algebras and Harmonic Analysis 2017, Yau Mathematical Sciences Center, Tsinghua University, December 18-22, 2017, Sanya, China
79. *A strange function space associated with positive semidefinite operators*, Department of Mathematics, The Chinese University of Hong Kong, 15 December, 2017, Shatin, Hong Kong
80. *Strength functions: a strange function space associated to positive semidefinite operators*, 2017 Conference on Function Algebras, Nihon University, October 20-22, 2017, Funabashi, Japan
81. *Order automorphisms in matrix algebras and in operator algebras, and their applications*, ILAS 2017, Iowa State University, July 24-28, 2017, Ames, Iowa, USA.
82. *Preserver problems and Jordan isomorphisms* Order Structures, Jordan Algebras and Geometry, Lorentz Center, May 29 - June 2, 2017, Leiden, The Netherlands.
83. *On some open preserver problems*, Algebra Students' Seminar, Moscow State University, April 14, 2017, Moscow, Russia.
84. *Algebraic isomorphisms in the descriptions of generalized isometries on spaces of positive definite matrices*, Algebra Seminar, Moscow State University, April 10, 2017, Moscow, Russia.
85. *Preserver problems*, Seminar at Department of Mathematics, CEU, February 1, 2017, Budapest, Hungary.

86. *Transformations of the positive cone in operator algebras*, Recent Advances in Operator Theory and Operator Algebras 2016, Indian Statistical Institute Bangalore, December 13-22, 2016, Bangalore, India.
87. *Commutativity in operator algebras*, International Conference of The Indian Mathematics Consortium (TIMC) in cooperation with American Mathematical Society (AMS), Banaras Hindu University, December 14-17, 2016, Vanarasi, India.
88. *Commutativity in operator algebras*, Preserver Problems and Their Related Topics, Nihon University, November 8-9, 2016, Tokyo, Japan.
89. *Transformers of operator means*, Commutative algebra, Banach algebras (preserver problem), Hypergroups and their related topics, Nara University of Education, November 4-6, 2016, Nara, Japan.
90. *Isometries as isomorphisms*, Researches on isometries from various viewpoints, RIMS, Kyoto University, October 31 - November 2, 2016, Kyoto, Japan.
91. *Preserver problems*, Colloquium Talk, Indian Statistical Institute, September 22-24, 2016, Bangalore, India.
92. *Preservers on positive matrices and operators*, TSSRK Fest, Indian Statistical Institute, September 22-24, 2016, Bangalore, India.
93. *Preservers on positive matrices and operators*, 20th Conference of the International Linear Algebra Society (ILAS), KU Leuven, July 11-15, 2016, Leuven, Belgium.
94. *Maps compatible with operator means*, 26th International Conference on Operator Theory, June 27 - July 2, 2016, Timisoara, Romania.
95. *Commutativity in operator algebras*, 54th International Symposium on Functional Equations, June 12-19, 2016, Hajdúszoboszló, Hungary.
96. *Maps compatible with operator means*, International Workshop on Applied Analysis and Optimization 2016 (IWAAO2016), Research Center for Interneural Computing, China Medical University, May 27-29, 2016, Taichung, Taiwan.
97. *Transformations on positive matrices and operators*, Mini-workshop on Functional Analysis, NSYSU, May 19, 2016, Kaohsiung, Taiwan
98. *New results on preservers - Transformations on positive matrices and operators*, Seminar of the Institute of Analysis, TU Dresden, April 27, 2016, Dresden, Germany.

99. *Mátrixok függvényei*, Eötvös Kollégium, Matematika Műhely, November 27, 2015, Szeged, Hungary
100. *Izometriák mint izomorfizmusok*, Algebra Seminar, Rényi Institute of HAS, November 16, 2015, Budapest, Hungary.
101. *Linear bijections on von Neumann factors commuting with λ -Aluthge transform*, AMS Fall Southeastern Sectional Meeting, University of Memphis, October 17-18, 2015, Memphis, TN, USA
102. *Megőrzési transzformációk*, Doktori Nyílt Nap, University of Szeged, October 2, 2015, Szeged, Hungary
103. *Isometries and isomorphisms on positive definite matrices*, 10th Workshop on Functional Analysis and its Applications in Mathematical Physics and Optimal Control, September 7-12, 2015, Kočovce, Slovak Republic
104. *Linear bijections on von Neumann factors commuting with λ -Aluthge transform*, Seminar talk, Nihon University, June 6, 2015, Tokyo, Japan.
105. *On isometries of some matrix spaces*, Colloquium talk, Department of Mathematics, Waseda University, June 5, 2015, Tokyo, Japan.
106. *Generalized Mazur-Ulam theorems and isometries of positive definite cones in operator algebras*, International Conference on Preserver Problems and Related Topics, Niigata University, May 24, 2015, Niigata, Japan.
107. *Izometriák és izomorfizmusok*, Colloquium talk, Bolyai Institute, University of Szeged, April 14, 2015, Szeged, Hungary.
108. *Generalized Mazur-Ulam theorems and isometries of matrix spaces*, Seminar talk, Department of Mathematics, The University of Mississippi, March 20, 2015, Oxford MS, USA.
109. *Generalized Mazur-Ulam theorems and isometries of matrix spaces*, Colloquium talk, Department of Mathematical Sciences, The University of Memphis, March 26, 2015, Memphis TN, USA.
110. *Általánosított Mazur-Ulam tételek és mátrixterek izometriái*, Seminar of the Department of Analysis, Budapest University of Technology and Economics, January 11, 2015, Budapest, Hungary.
111. *Preservers: transformations on quantum structures and isometries of matrix spaces*, Series of lectures at Winter School in Abstract Analysis, Charles University, January 10-17, 2015, Švratka, Czech Republic

112. *Isometries of matrix spaces*, Varcza Árpád Emléknep, College of Nyíregyháza, October 30, 2014, Nyíregyháza, Hungary.
113. *On the standard K -loop structure of positive invertible elements in a C^* -algebra*, Analysis Seminar, University of Innsbruck, October 24 - 26, 2014, Innsbruck, Austria.
114. *Quantum structures and their transformations*, A course at the CIMPA Research School on "Operator theory and the principles of quantum mechanics" University Moulay Ismail, 2014 September 8-17, Meknes, Morocco.
115. *Isometries and isomorphisms of spaces of positive definite and unitary matrices*, International Linear Algebra Society (ILAS) 2014 Meeting, August 6 - 9, 2014, Seoul, South Korea
116. *On the standard K -loop structure of positive invertible elements in a C^* -algebra*, IWOTA 2014, VU University Amsterdam, July 14 - 18, 2014, Amsterdam, The Netherlands.
117. *Isomorphisms and generalized isometries of positive definite cones and unitary groups in operator algebras*, Zagreb Workshop on Operator Theory, University of Zagreb, July 3 - 4, 2014, Zagreb, Croatia
118. *Transformations on density operators preserving quantum relative entropy or related quantities*, Canadian Mathematical Society, 2014 Summer Meeting, June 6 - 9, Winnipeg, Canada.
119. *An operation on the positive definite cone of a C^* -algebra and its algebraic properties*, Colloquium Talk, Department of Mathematics, University of Manitoba, June 6, 2014, Winnipeg, Canada.
120. *Isomorphisms and generalized isometries of positive definite cones and unitary groups in operator algebras*, The 7th Conference on Function Spaces, Southern Illinois University, May 20 - 24, 2014, Edwardsville, USA.
121. *On an operation on the positive definite cone of a C^* -algebra*, Seminar Talk, Department of Mathematics, University of Denver, May 16, 2014, Denver, USA.
122. *Algebraic properties of some operations on C^* -algebras*, Seminar Talk, Department of Mathematics, University of Wyoming, May 13, 2014, Laramie, USA.
123. *On certain operations on the set of positive invertible elements in a C^* -algebra*, Seminar Talk, Department of Mathematics and Computer

- Science, West University of Timisoara, April 3, 2014, Timisoara, Romania
124. *On the standard K -loop structure of positive invertible elements in a C^* -algebra*, 14th Debrecen-Katowice Winter Seminar on Functional Equations and Inequalities, January 29 - February 1, 2014, Hajdúszoboszló, Hungary.
 125. *Transformations on positive definite matrices preserving distances*, Functional Analysis Workshop in honour of Z. Sebestyén's 70th birthday, Eötvös Loránd University, January 10, 2014, Budapest, Hungary.
 126. *Isometries of certain nonlinear spaces of matrices and operators*, IWOTA 2013, Indian Institute of Science, December 16-20, 2013, Bangalore, India.
 127. *Transformations on positive definite matrices preserving distance measures*, Analysis Seminar, University of Innsbruck, November 29 - December 1, 2013, Innsbruck, Austria.
 128. *Preserver Problems on Quantum Structures*, Colloquium Talk, Department of Applied Mathematics, National Sun Yat-sen University, November 7, 2013, Kaohsiung, Taiwan.
 129. *Reflexivity of automorphism groups and isometry groups of some operator structures*, Seminar Talk, Department of Applied Mathematics, National Sun Yat-sen University, November 6, 2013, Kaohsiung, Taiwan.
 130. *Transformations on spaces of unitary or positive definite matrices: Isometries and isomorphism*, Seminar Talk, Department of Applied Mathematics, National Sun Yat-sen University, October 30, 2013, Kaohsiung, Taiwan.
 131. *Isometries and isomorphisms of some spaces of matrices*, Operator Algebra Seminar, Department of Mathematics, University of Rome "Tor Vergata", September 25, 2013, Rome, Italy.
 132. *Nonlinear preserver transformations on some quantum structures*, Seminar of Department of Mathematics and Department of Physics, University of Calabria, September 19, 2013, Rende, Italy.
 133. *Isometries and isomorphisms of some spaces of matrices*, Advanced School and Workshop on Matrix Geometries and Applications, ICTP, July 1-12, 2013, Trieste, Italy.

134. *Sequential isomorphisms and endomorphisms of Hilbert space effect algebras*, Numbers, Functions, Equations 2013, June 28-30, 2013, Visegrád, Hungary.
135. *Reflexivity of automorphism groups and isometry groups of some operator structures*, Sz.-Nagy Centennial Conference, University of Szeged, June 24-28, 2013, Szeged, Hungary.
136. *Some non-linear preservers on quantum structures*, International Linear Algebra Society (ILAS) 2013 Meeting, June 3-7, 2013, Providence, RI, USA.
137. *Izometriák és izomorfizmusok*, "Lendület" FIFA'13 Workshop, University of Debrecen, April 26-27, 2013, Debrecen, Hungary.
138. *Isometries of some nonlinear spaces of operators*, AMS 2013 Spring Southeastern Section Meeting, March 1-3, 2013, University of Mississippi, Oxford, MS, USA.
139. *Transformations of the unitary group on a Hilbert space*, The Thirteenth Katowice-Debrecen Winter Seminar on Functional Equations and Inequalities, January 30-February 2, 2013, Zakopane, Poland.
140. *Preserver problems on quantum structures*, Seminar of the Department of Physics, University of Calabria, December 17, 2012, Cosenza, Italy.
141. *Operátorstruktúrák izometriái*, "Celebration of Hungarian Science" Meeting of Debrecen Branch of the Hungarian Academy of Sciences, November 15, 2012, Debrecen, Hungary.
142. *Isometries of nonlinear operator structures*, Seminar of the Institute of Analysis, TU Dresden, November 1, 2012, Dresden, Germany.
143. *Isometries of nonlinear structures of linear operators*, International Workshop on Functional Analysis, October 12-14, 2012, Timisoara, Romania.
144. *C^* -algebras with isometric unitary groups are Jordan $*$ -isomorphic*, Seminar talk at the Department of Mathematics, University of Ljubljana, October 4, 2012, Ljubljana, Slovenia.
145. *Sequential isomorphisms and endomorphisms of Hilbert space effect algebras*, 11th Biennial Meeting of the International Quantum Structure Association, University of Cagliari, July 23-27, 2012, Cagliari, Italy.
146. *Reflexivity of isometry groups and automorphism groups of structures of Hilbert space operators*, 50th International Symposium on Functional Equations, University of Debrecen, June 17-24, 2012, Hajdúszoboszló, Hungary.

147. *Algebraic properties of isometries on structures of linear operators*, 5th Croatian Mathematical Congress, University of Rijeka, June 18–21, 2012, Rijeka, Croatia.
148. *Reflexivity of the isometry groups of some spaces of Hilbert space operators*, International Conference on Mathematics and Statistics (ICOMAS-2012), University of Memphis, May 15–18, 2012, Memphis, TN, USA.
149. *Isometries of spaces of operators and functions*, "7th Floor Seminar", Waseda University, November 8, 2011, Tokyo, Japan.
150. *Isometries of spaces of operators and functions*, Workshop on Commutative Algebra, Nara University of Education, November 4–6, 2011, Nara, Japan.
151. *Order-preserving maps on spaces of operators and applications*, Research on preserver problems related to Banach algebras and its applications, RIMS, Kyoto University, October 31 - November 2, 2011, Kyoto, Japan.
152. *Transformations of the unitary group*, Research on preserver problems related to Banach algebras and its applications, RIMS, Kyoto University, October 31 - November 2, 2011, Kyoto, Japan.
153. *Transformations of the unitary group and sequential endomorphisms of effect algebras*, Seminar talk at the Department of Mathematics, University of Ljubljana, September 8, 2011, Ljubljana, Slovenia.
154. *Order automorphisms on positive definite operators and some applications*, The 17th ILAS Conference, TU Braunschweig, August 22–26, 2011, Braunschweig, Germany.
155. *Transformations on self-adjoint operators preserving commutativity or a measure of commutativity*, IWOTA 2011, University of Seville, July 3–9, 2011, Seville, Spain.
156. *Isometries and isomorphisms*, Seminar talk at the Department of Mathematics, University of Ljubljana, June 28, 2011, Ljubljana, Slovenia.
157. *Izometriák és izomorfizmusok*, "Functional Analysis and Preserver Problems" Meeting of the Division of Mathematics of the Hungarian Academy of Sciences, May 11, 2011, Budapest, Hungary.
158. *Recent results on isometries of nonlinear spaces of functions and operators*, Mathematical Colloquium, Department of Mathematics, University of Osijek, April 28, 2011, Osijek, Croatia.

159. *Általános operátor-közepet megőrző transzformációk*, Symposium dedicated to L. Losonczy's 70th birthday, Debrecen Branch of the Hungarian Academy of Sciences, March 1, 2011, Debrecen, Hungary.
160. *Transformations on self-adjoint operators preserving a measure of commutativity*, The Eleventh Katowice-Debrecen Winter Seminar on Functional Equations and Inequalities, February 2–5, 2011, Wisła-Malinka, Poland.
161. *Order automorphisms of positive operators with some applications*, Seminar talk at the Department of Mathematics, University of Ljubljana, November 5, 2010, Ljubljana, Slovenia.
162. *Order automorphisms on positive definite operators and a few applications*, Conference on Inequalities and Applications '10, September 19–25, 2010, Hajdúszoboszló, Hungary.
163. *Linear maps on observables in von Neumann algebras preserving the maximal deviation*, IWOTA 2010, TU Berlin, July 12–16, 2010, Berlin, Germany.
164. *Transformations preserving relative entropies*, Quantum Structures Boton 2010, 10th Biennial IQSA Meeting, June 21–26, 2010, Boston, USA.
165. *Isometries of spaces of linear operators and probability distribution functions*, The 6th Conference on Function Spaces, Southern Illinois University at Edwardsville, May 18–22, 2010, Edwardsville, USA.
166. *Isometries of metric spaces of functions and operators*, Conference "Operators, Spaces, Algebras, Modules", University of Zagreb, March 1–4, 2010, Zagreb, Croatia.
167. *Isometries and affine automorphisms of spaces of probability distribution functions*, 10th Debrecen-Katowice Winter Seminar on Functional Equations and Inequalities, February 2–6, 2010, Zamárdi, Hungary.
168. *A kvantummechanikában fellépő bizonyos operátorstruktúrák izometriái*, von Neumann Seminar, Institute of Mathematics, Technical University of Budapest, December 15, 2009, Budapest, Hungary.
169. *A metrikus és algebrai szerkezet kapcsolata metrikus algebrai struktúrákban*, Joint Seminar of the Institute of Mathematics and the Faculty of Informatics, University of Debrecen, November 19, 2009, Debrecen, Hungary.

170. *Isometries of some metric spaces of functions and operators*, Seminar Talk, Technical University of Dresden, October 29, 2009, Dresden, Germany.
171. *Thompson isometries and transformations preserving the geometric mean of positive operators*, 47th International Symposium on Functional Equations, June 14–20, 2009, Gargnano, Italy.
172. *Surjective isometries of some metric spaces of functions and operators*, Seminar talk, The University of Montana, April 29, 2009, Missoula, USA.
173. *Preservers on quantum structures*, Colloquium talk, The University of Montana, April 28, 2009, Missoula, USA.
174. *Transformations on the space of positive operators*, AMS Sectional Meeting, San Francisco State University, April 25–26, 2009, San Francisco, USA.
175. *Wigner-type results concerning transformations on density operators*, Quantum Structure 2009, February 24–27, 2009, Kočovce, Slovakia.
176. *Transformations preserving divergences or distances on spaces of positive operators*, Seminar talk at the Department of Mathematics, University of Ljubljana, December 11, 2008, Ljubljana, Slovenia.
177. *Surjective isometries of some metric spaces of functions and operators*, Seminar talk at the Department of Mathematics, University of Zagreb, December 5, 2008, Zagreb, Croatia.
178. *Preservers on quantum structures*, Colloquium talk at the Department of Mathematics, University of Zagreb, December 3, 2008, Zagreb, Croatia.
179. *Matematikai struktúrák transzformációi: megőrzési problémák*, "Celebration of Science" Meeting of Debrecen Branch of the Hungarian Academy of Sciences, November 28, 2008, Debrecen, Hungary.
180. *Surjective isometries of some metric spaces of functions and operators*, Colloquium talk at the Department of Mathematics, Faculty of Electrical Engineering, Czech Technical University, November 4, 2008, Prague, Czech Republic.
181. *Surjective isometries of some metric spaces of functions and operators*, Seminar talk at the Institute of Mathematics, Physics and Mechanics, University of Ljubljana, October 29, 2008, Ljubljana, Slovenia.

182. *Függvények és operátorok metrikus tereinek izometriáiról*, Mathematical Colloquium, Bolyai Institute, University of Szeged, October 9, 2008, Szeged, Hungary.
183. *Some preserver problems on quantum structures*, Quantum Structures'08, 9th Biennial IQSA Meeting, July 6–12, 2008, Sopot, Poland.
184. *Transformations on von Neumann algebras preserving maximal deviation*, "Linear Analysis and Mathematical Physics" Meeting of the Division of Mathematics of the Hungarian Academy of Sciences, May 21, 2008, Budapest, Hungary.
185. *Maps on quantum states preserving the relative entropy*, Gyula 60, Workshop on Functional Equations, Inequalities, and Applications, Debrecen Branch of the Hungarian Academy of Sciences, April 24, 2008, Debrecen, Hungary.
186. *Preserver problems on quantum structures*, Mathematical Colloquium, Department of Mathematics, University of Osijek, April 3, 2008, Osijek, Croatia.
187. *Maps on positive operators preserving operator means*, 8th Debrecen-Katowice Winter Seminar on Functional Equations and Inequalities, January 30 - February 2, 2008, Poroszló, Hungary.
188. *Order automorphisms of quantum observables and effects*, 6th Workshop on Functional Analysis and its Applications in Mathematical Physics and Optimal Control, September 10–15, 2007, Nemecká, Slovak Republic.
189. *Monotone transformations on quantum observables and effects with respect to different orders*, 45th International Symposium on Functional Equations, June 24 - July 1, 2007, Bielsko-Biała, Poland.
190. *Megőrzési problémák*, Conference on 10th Anniversary of the Bolyai Research Fellowship, Hungarian Academy of Sciences, April 26, 2007, Budapest, Hungary.
191. *Preserver problems*, Mathematical Institute of The Slovak Academy of Sciences, March 20, 2007, Bratislava, Slovakia.
192. *Preserver problems*, Festkolloquium, Fachrichtung Mathematik, Technische Universität Dresden, December 11, 2006, Dresden, Germany.
193. *Megőrzési transzformációk*, "Generations in Science" Conference at the Hungarian Academy of Sciences, December 1, 2006, Budapest, Hungary

194. *Additivity of multiplicative maps on structures of linear operators*, Second Short Workshop on Operator Theory, Agricultural University of Kraków, June 24-27, 2006, Kraków, Poland.
195. *Additivity of multiplicative maps on structures of linear operators*, 44th International Symposium on Functional Equations, May 14–21, 2006, Louisville, Kentucky, USA.
196. *Operátorstruktúrák multiplikatív leképezéseinek additivitása* "Functional equations, harmonic analysis, spectral synthesis" Meeting of the Division of Mathematics of the Hungarian Academy of Sciences, May 2, 2006, Budapest, Hungary.
197. *Multiplicative maps on algebraic structures of linear operators*, Seminar of the Department of Mathematics, Pedagogical Faculty, University of Maribor, December 21, 2005, Maribor Slovenia.
198. *Wigner tételétől a lokális automorfizmusokig*, Joint Seminar of the Institute of Mathematics and the Faculty of Informatics, University of Debrecen, December 1, 2005, Debrecen, Hungary.
199. *Preservers on quantum structures*, Hungarian-Croatian Workshop on Informatics and Mathematics, October 5–8, 2005, Debrecen, Hungary.
200. *Non-linear Jordan triple automorphisms of sets of self-adjoint matrices and operators*, 5th Workshop on Functional Analysis and its Applications in Mathematical Physics and Optimal Control, September 12–17, 2005, Nemecká, Slovak Republic.
201. *Az önadjungált operátorok halmazának transzformációiról*, "Functional-analysis" Meeting of the Division of Mathematics of the Hungarian Academy of Sciences, June 8, 2005, Budapest, Hungary.
202. *Characterizations of the determinant on sets of Hermitian matrices*, 43th International Symposium on Functional Equations, May 15–21, 2005, Batz-sur-Mer, France.
203. *Isometries of quantum effects*, 42nd International Symposium on Functional Equations, June 20–27, 2004, Hradec nad Moravici, Czech Republic.
204. *Preservers on Hilbert space effects*, 5th Joint Conference on Mathematics and Computer Science, June 9–12, 2004, Debrecen, Hungary.
205. *A kvantumállapotok halmazának transzformációiról*, Seminar on Analysis, Institute of Mathematics, Technical University of Budapest, June 7, 2004, Budapest, Hungary.

206. *A kvantumállapotok halmazának transzformációjáról*, "Functional Equations and Inequalities" Meeting of the Division of Mathematics of the Hungarian Academy of Sciences, May 12, 2004, Budapest, Hungary.
207. *Some preservers on the set of bounded observables*, 4th Workshop on Functional Analysis and its Applications in Mathematical Physics and Optimal Control, September 8–13, 2003, Nemecká, Slovak Republic.
208. *Preservers on quantum structures*, Seminar talk of the Institute of Analysis, Technical University of Dresden, June 5, 2003, Dresden, Germany.
209. *Some preservers on density operators*, Conference on Topological Algebras, Their Applications, and Related Results (to celebrate the 70th birthday of Professor Wiesław Żelazko), May 11–17, 2003, Bedlewo, Poland.
210. *Megőrzési problémák Hilbert-tér operátorok algebrai struktúráin*, Seminar talk of the Bolyai Institute of the University of Szeged, April 25, 2002, Szeged, Hungary.
211. *Some preserver problems in structures of Hilbert space operators appearing in quantum mechanics*, Seminar of the Institute of Mathematics, Physics and Mechanics, University of Ljubljana, March 27, 2002, Ljubljana, Slovenia.
212. *Local automorphisms*, 3rd Analysis Miniseminar (Dedicated to L. Losonczi's 60th birthday) Hungarian Academy of Sciences, Local Commission in Debrecen, October 13, 2001, Debrecen, Hungary.
213. *Ortho-order automorphisms of Hilbert space effect algebras*, The 8th International Conference on Functional Equations and Inequalities, September 10–15, 2001, Zlockie, Poland.
214. *Transformations on the set of all n -dimensional subspaces of a Hilbert space preserving principal angles*, 3rd Workshop on Functional Analysis and its Applications in Mathematical Physics and Optimal Control, September 4–9, 2001, Nemecká, Slovak Republic.
215. *Transformations on the set of all n -dimensional subspaces of a Hilbert space preserving principal angles*, 39th International Symposium on Functional Equations, August 12–18, 2001, Sandbjerg Estate, Denmark.
216. *Hilbert-tér effektjei halmazának automorfizmusairól*, Seminar on Analysis, Institute of Mathematics, Technical University of Budapest, April 9, 2001, Budapest, Hungary.

217. *On the automorphisms of effect algebras*, Seminar talk at the joint Ljubljana-Maribor Seminar, Institute of Mathematics, Physics and Mechanics, University of Ljubljana and Department of Mathematics, University of Maribor, February 15, 2001, Slovenia.
218. *Generalizations of Wigner's theorem on symmetry transformations*, Seminar talk at the Technical University of Dresden, November 17, 2000, Dresden, Germany.
219. *Local automorphisms and local isometries of operator algebras*, Seminar talk at the Technical University of Dresden, November 16, 2000, Dresden, Germany.
220. *Generalizations of Wigner's theorem on symmetries*, Quantum Probability: Probability and Operator Algebras with Applications in Mathematical Physics, August 31 – September 6, 2000, Göd, Hungary.
221. *On the additivity of multiplicative maps on operator algebras*, 38th International Symposium on Functional Equations, June 11–18, 2000, Noszvaly, Hungary.
222. *Néhány függvényegyenletről operátoralgebrákon*, "Functional Equations" Meeting of the Division of Mathematics of the Hungarian Academy of Sciences, May 10, 2000, Budapest, Hungary.
223. *Isomorphisms of standard operator algebras*, 90 Years of The Reproducing Kernel Property, Jagiellonian University, April 17-21, 2000, Kraków, Poland.
224. *Operátoralgebrák félcsoport izomorfizmusairól*, Seminar talk at Eötvös Loránd University, April 3, 2000, Budapest, Hungary.
225. **-semigroup endomorphisms of $B(H)$* , Seminar on Functional Analysis, Jagiellonian University, October 12, 1999, Kraków, Poland.
226. *Reflexivity of the automorphism and isometry groups of operator algebras*, Seminar of the Mathematical Institute of the Polish Academy of Sciences at Kraków, October 11, 1999, Kraków, Poland.
227. *Wigner's unitary-antiunitary theorem for Hilbert modules*, 2nd Workshop on Functional Analysis and its Applications in Mathematical Physics and Optimal Control, September 13-18, 1999, Nemecká, Slovak Republic.
228. *Local automorphisms of some quantum mechanical structures*, Functional Analysis and Applications: Memorial Conference for Béla Szőkefalvi-Nagy, August 2-6, 1999, Szeged, Hungary.

229. *Operátoralgebrák leképezéseinek reflexivitása*, Seminar on Analysis, Institute of Mathematics, Technical University of Budapest, June 7, 1999, Budapest, Hungary.
230. *Néhány gyűrűelméleti eredmény alkalmazása operátoralgebrai problémákra*, Seminar of the Department of Algebra, Mathematical Research Institute of the Hungarian Academy of Sciences, May 17, 1999, Budapest, Hungary.
231. Spring School on Functional Analysis, April 18–24, 1999, Paseky, Czech Republic.
232. *Multiplicative preservers on operator algebras*, Seminar of the Department of Mathematics, University of Maribor, March 1, 1999, Maribor, Slovenia.
233. *A Wigner unitér-antiunitér tétel egy algebrai bizonyítása*, Seminar talk at Eötvös Loránd University, October 20, 1998, Budapest, Hungary.
234. *A Wigner unitér-antiunitér tétel egy algebrai bizonyítása*, Short conference on the occasion of B. Szőkefalvi-Nagy's 85th birthday, September 30, 1998, Szeged, Hungary.
235. *Reflexivity of the automorphism and isometry groups of operator algebras*, The 17th International Conference on Operator Theory, June 23–26, 1998, Timisoara, Romania.
236. *Stability of the surjectivity of endomorphisms and isometries of $B(H)$* , Numbers, Functions, Equations'98, June 1–6, 1998, Noszvaly, Hungary.
237. *An algebraic approach to Wigner's unitary-antiunitary theorem*, 36th International Symposium on Functional Equations, May 24–30, 1998, Brno, Czech Republic.
238. *Reflexivity of the automorphism and isometry groups of operator algebras*, Joint Seminar on Functional Analysis and C^* -algebras, University of Paderborn, July 3, 1997, Paderborn, Germany.
239. *Reflexivity of the automorphism and isometry groups of operator algebras and the Stone-Čech compactification*, Oberseminar Funktionentheorie/Zahlentheorie, University of Paderborn, June 4, 1997, Paderborn, Germany.
240. *Jordan *-derivations on operator algebras*, Joint Graz-Maribor Workshop on Derivations and Functional Equations, November 29 – 30, 1996, Maribor, Slovenia.

241. *Additive mappings approximated by positive operators on operator ideals*, ICAOR International Conference on Approximation and Optimization, July 29 – August 1, 1996, Cluj-Napoca, Romania.
242. *Algebraic differences among group algebras of compact infinite groups : The nonexistence of a surjective ring homomorphism from $L^p(G)$ onto $L^q(G')$* , Ring Theory Conference, A satellite conference of the Second European Congress in Mathematics, July 15–20, 1996, Miskolc, Hungary.
243. *Topological reflexivity of the automorphism and isometry groups of $B(H)$* , The 16th International Conference on Operator Theory, July 2–8, 1996, Timisoara, Romania.
244. *Characterization of additive $*$ -homomorphisms and Jordan $*$ -homomorphisms on operator ideals*, 34th International Symposium on Functional Equations, June 10–19, 1996, Wisla-Jawornik, Poland.
245. *Reflexivity in the space of linear transformations on an operator algebra*, Seminar of the University of Maribor, April 4, 1996, Maribor, Slovenia.
246. *Automatic surjectivity of ring homomorphisms on H^* -algebras and algebraic differences among some group algebras of compact groups*, Stefan Banach International Mathematical Center, LINEAR OPERATORS II, January 8–February 22, 1996, Warszawa, Poland.
247. *Two characterizations of additive $*$ -automorphisms of $\mathcal{B}(H)$* , The 5th International Conference on Functional Equations and Inequalities, September 4–9, 1995, Zlockie, Poland.
248. *Wigner's unitary-antiunitary theorem via Herstein's theorem on Jordan homomorphisms*, First Joint Workshop on Modern Applied Mathematics, June 12–16, 1995, Ilieni (Illyefalva), Romania.
249. *Automatic surjectivity of endomorphisms of operator algebras*, Seminar of the University of Maribor, June 2, 1995, Maribor, Slovenia.
250. *Recent results on automatic surjectivity of $*$ -endomorphisms of operator algebras*, 2nd Debrecen-Graz Seminar, May 11–14, 1995, Zamárdi, Hungary.
251. *Isomorphisms of operator ideals*, First Slovenian Congress of Mathematics, October 20–22, 1994, Ljubljana, Slovenia.
252. *Operátor ideálok izomorfizmusa*, Seminar of the Institute of Mathematics and Informatics, Lajos Kossuth University, September 29, 1994, Debrecen, Hungary.

253. *The range of a Jordan $*$ -derivation*, The 15th International Conference on Operator Theory, June 6–10, 1994, Timisoara, Romania.
254. *p -classes of an H^* -algebra*, XIII. Österreichischer Mathematikerkongreß, September 20–24, 1993, Linz, Austria.
255. *On local derivations of operator algebras*, 31st International Symposium on Functional Equations, August 22–28, 1993, Debrecen, Hungary.
256. *On compact operators*, TEMPUS Summer School, August 9–28, 1993, Debrecen, Hungary.

REFEREE WORK

Miscellaneous Referee Work

- Referee for promotions and job applications at universities in China, India, Slovenia, South Africa, USA.
- Referee for the 7th and 10th Iranian Functional Analysis Awards, 2017, 2020, Iran.
- Referee for the Stieltjes Prize 2019 (the prize for the best PhD thesis in mathematics in the Netherlands).
- Reviewer of research portfolio for the National Research Foundation in South Africa.
- Reviewer for fellowship of the Indian National Science Academy, India.

Referee for Grants

- Campus France, Prestige Programme, France
- Hungarian National Foundation for Scientific Research, Hungary
- King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia
- Ministry of Education, Science and Sport, Slovenia
- Ministry of Science, Education and Sports, Croatia
- National Research Development and Innovation Office, Hungary
- National Research Foundation, South Africa.
- FWO Research Foundation - Flanders, Belgium
- The Natural Sciences and Engineering Research Council of Canada
- United Arab Emirates University, Abu Dhabi, United Arab Emirates

Referee's Reports for Journals and Books

- Abstr. Appl. Anal.
- Acta Acad. Paedagog. Agriensis Sect. Mat. N.S.
- Acta Math. Hung.
- Acta Math. Acad. Paedagog. Nyhaziensis. N.S.
- Acta Math. Scientia
- Acta Math. Sinica
- Acta Sci. Math. (Szeged)
- Adv. Math.
- Aequationes Math.
- Amer. Math. Monthly
- Anal. Math.

- Anal. PDE
- Ann. Funct. Anal.
- Ann. Pol. Math.
- Arch. Math.
- Banach Cent. Publ.
- Banach J. Math. Anal.
- Bull. Belgian Math. Soc.
- Bull. Korean Math. Soc.
- Bull. London Math. Soc.
- Bull. Malays. Math. Sci. Soc.
- Canad. Math. Bull.
- Cent. Eur. J. Math. (CEJM)
- Colloq. Math.
- Commun. Math. Phys.
- C.R. Math. Acad. Sci. Paris
- Complex Anal. Oper. Theory
- Electr. J. Lin. Alg.
- Found. Phys.
- Function Spaces, K. Jarosz, Edt. Contemporary Mathematics vol. 328, American Mathematical Society, 2003.
- Function Spaces, K. Jarosz, Edt. Contemporary Mathematics vol. 435, American Mathematical Society, 2007.
- Function Spaces in Modern Analysis, K. Jarosz, Edt. Contemporary Mathematics vol. 547, American Mathematical Society, 2011.
- Functional Equations – Results and Applications, Z. Daróczy and Zs. Páles (eds.), Advances in Mathematics, vol 3., Kluwer Acad. Publ., Dordrecht, 2001.
- Glasnik Math.
- Glasgow Math. J.
- Houston J. Math.
- Illinois J. Math.
- Int. Math. Res. Not. IMRN
- Indag. Math.
- Indian J. Pure Appl. Math.
- Inequalities and Applications – Proceedings of the Conference on Inequalities and Applications '07, International Series of Numerical Mathematics, Birkhäuser Verlag.
- Integral Equations Operator Theory
- Int. J. Math. Math. Sci.
- Int. J. Theor. Phys.
- Israel J. Math.
- J. Applied Math.
- J. Funct. Anal.
- J. Funct. Space Appl.
- J. Ineq. Appl.

- J. Ineq. Pure Appl. Math.
- J. Austral. Math. Soc.
- J. London Math. Soc.
- J. Math. Anal.
- J. Math. Anal. Appl.
- J. Math. Inequal.
- J. Math. Phys.
- J. Math. Phys. Anal. Geo.
- J. Oper. Theo.
- J. Phys. A.
- Linear Algebra Appl.
- Linear Multilinear Algebra
- Math. Ann.
- Math. Nachr.
- Math. Phys. Anal. Geom.
- Math. Slovaca
- Math. Z.
- Miskolc Math. Notes
- Monatsh. Math.
- New York J. Math.
- Oper. Matrices
- Period. Math. Hungar.
- Proc. Amer. Math. Soc.
- Proc. Edinburgh Math. Soc.
- Proc. London Math. Soc.
- Proc. Royal Soc. Edinb. A
- Publ. Mat.
- Publ. Math. Debrecen
- Pure Appl. Math. Q.
- Real Anal. Exchange
- Rep. Math. Phys.
- Results Math.
- Rocky Mountain J. Math.
- Quaest. Math.
- SIAM J. Matrix Anal. Appl.
- Springer Verlag, review a volume in a series.
- Studia Math.
- Studia Sci. Math. Hung.
- Taiwan. J. Math.
- Topology Appl.
- Z. Anal. Anwend.

Reviews

- Math. Rev.
- Zbl. Math.

Book Reviews

- Publ. Math. Debrecen