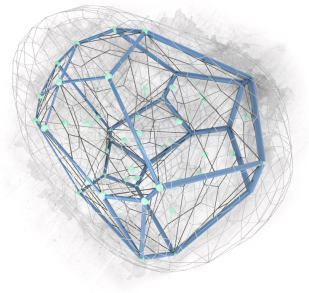
2025 Szeged Workshop on Convexity

Programme



May 29, Thursday

8:00 – 8:25 *Registration*

8:25 – 8:30 *Opening words*

8:30 – 9:10 **Elisabeth M. Werner** *Floating bodies for ball-convex bodies*

9:15 – 9:35 **Ansgar Freyer** *Equivariant valuations of lattice polygons*

9:40 – 10:00 **Jonas Knoerr** *A Paley-Wiener-Schwartz theorem for valuations on convex functions*

10:00 – 10:30 *Coffee break*

10:30 – 11:10 **Carsten Schütt** *Expected extremal area of facets of random polytopes*

11:15 – 11:35 **Florian Besau** *Random polytopes in convex bodies: a bridge between extremal containers*

11:40 – 12:00 **Mohamed Abdeldjalil Mouamine** *Vector-valued valuations on convex functions*

12:00 – 14:00 *Lunch break*

14:00 – 14:40 **Károly J. Böröczky** *Extremality of the mean width and the ℓ-norm*

14:45 – 15:05 **Márton Naszódi** *John ellipsoids of revolution*

15:10 – 15:30 **Florian Grundbacher** *Optimality conditions for convex containment problems under affinity*

15:30 – 16:00 *Coffee break*

16:00 – 16:20 **Christian Kipp** *Shadow systems, decomposability and isotropic constants*

16:25 – 16:45 **Anna Zamojska-Dzienio** *Partitions of unity and barycentric algebras*

16:50 – 17:10 **Sylvia Silberger** *Maximal sublattices and Frattini sublattices of convex geometries with* $\operatorname{cdim} = 2$

17:15 – 18:30 *Poster session*

Alexandra Bakó-Szabó *Pairs of random points from a shell*

Barnabás Gárgyán *Extremality of diagonal sections of the cube*

Balázs Grünfelder *Variances of non-euclidean random polytopes*

Márk Oláh *Equidistant sets and their approximation*

Dániel István Papvári *Expectation of weighted intrinsic volumes of random polytopes*

Ádám Sagmeister *Circle packings of the hyperbolic plane*

Shanshan Wang *Normed variants of a theorem of Macbeath*

May 30, Friday

8:30 – 9:10 **Andrea Colesanti** *The mixed Christoffel problem*

9:15 – 9:35 **Georg C. Hofstätter** *Mixed volumes and mixed area measures of bodies of revolution*

9:40 – 10:00 **Lily Liu** *The measure concentration problem for convex bodies*

10:00 – 10:30 *Coffee break*

10:30 – 11:10 **Ilya Molchanov** *Poisson hulls and Efron type formulae*

11:15 – 11:35 **Tom Baumbach** *Characterization of cone-volumes via pyramids*

11:40 – 12:00 **István Talata** *On the homothetic kissing numbers of a tetrahedron*

12:00 – 14:00 *Lunch break*

14:00 – 14:50 *Public lecture:*
María A. Hernández Cifre *Mean type successive radii of convex bodies*

15:00 – 15:20 **Mei Han** *Packing minima of convex bodies*

15:25 – 15:45 **Zsolt Lángi** *On the approximation of convex bodies by monostable polyhedra*

15:45 – 16:15 *Coffee break*

16:15 – 16:35 **Jesús Yepes Nicolás** *On (complemented) Brunn-Minkowski type inequalities for measures*

16:40 – 17:00 **Nico Lombardi** *L_p Brunn-Minkowski type inequalities under projection constraints*

17:05 – 17:25 **Lidia Gordo Malagón** *On L_p Brunn-Minkowski type inequalities for a general class of functionals*

18:30 – 21:00 *Reception*

May 31, Saturday

8:30 – 9:10 **Alina Stancu** *On the planar homothethy conjecture*

9:15 – 9:35 **Fabian Mussnig** *A Pólya-Szegő type inequality for convex functions*

9:40 – 10:00 **Jacopo Ulivelli** *Between Brascamp-Lieb and Colesanti inequalities*

10:00 – 10:30 *Coffee break*

10:30 – 11:10 **Jan Kotrbatý** *A generalization of Godbersen's conjecture*

11:15 – 11:35 **Thomas Jahn** *Minkowski chirality*

11:40 – 12:00 **Mia Runge** *(r,D,R)-Blaschke-Santaló diagrams for three-dimensional convex bodies*