

# Trigonometric $BC_n$ Sutherland models and Hermann actions

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## Abstract

The Calogero–Sutherland models are among the most actively studied interacting many particle systems. Their popularity mainly stems from the fact that they are exactly solvable due to their geometric origin. In a joint work with L. Fehér we have derived the trigonometric quantum  $BC_n$  models from certain Hermann actions of  $U(N)$ . The applied technique is based on our recently developed general method of quantum Hamiltonian reduction under polar group actions. Our approach provides a conceptual understanding of the problem and finds the place of the  $BC_n$  models in the unifying framework of polar actions.