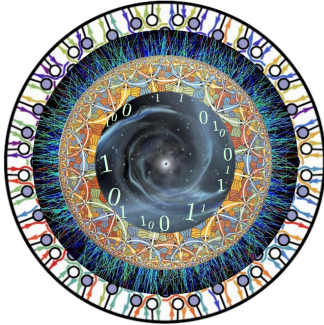


Center for Quantum Mathematics And Physics QMAP Colloquium



November 21, 2017

11:00am

Mathematical Science
Building, room 1147



UC DAVIS
UNIVERSITY OF CALIFORNIA

Nicolai Reshetikhin

U.C. Berkeley

Superintegrable Systems

Nicolai Reshetikhin is a prominent mathematical physicist and Professor of Mathematics at U.C. Berkeley and Professor of Mathematical Physics at the University of Amsterdam. He has made many important contributions to the theory of quantum integrable systems and statistical mechanics.



Abstract: A superintegrable Hamiltonian system on a $2n$ -dimensional phase space M is a Hamiltonian dynamical system with k Poisson commuting integrals of motion and $2n-k$ integrals of motion, which form a Poisson subalgebra in the algebra of functions on M . Commuting integrals generate the Poisson center of this subalgebra. Invariant tori in such systems are isotropic k -dimensional submanifolds. After an overview of superintegrability a series of example which will be given followed by a discussion of quantization.

The Center for Quantum Mathematics and Physics (QMAP) is a U.C. Davis initiative aimed at fostering a vibrant research environment for addressing foundational questions in modern theoretical and mathematical physics.

Lunch will be served after the talk: Come meet the speaker and congratulate Albert Schwarz for being named an AMS fellow!

Center for Quantum Mathematics and Physics (QMAP): <http://qmap.ucdavis.edu>

Department of Physics: <http://physics.ucdavis.edu>

Department of Mathematics: <http://math.ucdavis.edu>

