

Friday, February 10th (at 4.00pm, UK time)

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Title: On a superintegrable oscillator on an N-dimensional space with nonconstant curvature.

ABSTRACT

The so-called Darboux III oscillator is an exactly solvable N-dimensional nonlinear oscillator defined on a radially symmetric space with non-constant negative curvature. This oscillator can be interpreted as a smooth superintegrable deformation of the usual N-dimensional isotropic harmonic oscillator in terms of a non-negative parameter which is directly related to the curvature of the underlying space.

In this seminar, the integrability properties of the Darboux III oscillator are reviewed, and the Shannon information entropy for the quantum version of the Darboux III oscillator is computed.
