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Hidden Noether symmetries in quantum mechanics

In 1918 Noether published her landmark paper. In the past one hundred years her namesake theorem has been applied in different area of Physics, especially general relativity and classical Lagrangian mechanics. This talk aims to celebrate this landmark centennial by showing the application of Noether symmetries in the quantization of classical mechanics, a quantization method that preserves the Noether point symmetries as we have described for the first time in 2011, and since then successfully applied to various classical problems, e.g. families of Lienard nonlinear oscillators, N planar rotors, a radial harmonic oscillator on a double cone.