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**Jose M Vega-Guzman\*** ([jose.vegaguzman@howard.edu](mailto:jose.vegaguzman@howard.edu)), 2441 Sixth Street NW, Washington, DC 20059. *Schrödinger groups: An application in nonrelativistic quantum squeezing.*

The maximum kinematical invariance group of the quantum harmonic oscillator is discussed from the viewpoint of an Ermakov-type system. As an example, a multi-parameter family of the square integrable oscillator wave functions, which appears to be not obtainable by standard separation of variables is considered. Such family of wave functions is then used to describe the minimum-uncertainty squeezed states for the harmonic oscillator in nonrelativistic quantum mechanics. The invariance group of the generalized driven harmonic oscillator is shown to be isomorphic to the corresponding Schrödinger group of the free particle. (Received September 15, 2015)