

## Algebraic models and squeezed coherent states of anharmonic oscillators

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The motivation of this work is the Lie-algebraic approach to anharmonic quantum oscillators and in particular the Morse oscillator. Constructions of ladder operators, quantum bosons and states, including squeezed coherent states, related to the bound spectrum of the anharmonic quantum system, are considered. Properties of diatomic molecules are presented in the context of the models.