

# 学术报告

Virial Theorem and Elliptic Eigenvalue  
Calculations on  $\mathbb{R}^N$

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**Time:** 15:00-15:50, May 28 (Monday) 2018

**Venue:** Room 111, Center for Applied Mathematics

**Abstract:** The Virial Theorem is a fundamental property of multiparticle systems in quantum mechanics, and offers an elegant relationship between kinetic and potential energies of quantum states. In this talk, we present two numerical schemes based upon the Virial Theorem, the virial steepest descent and two-point linear extrapolation, to improve the accuracy of such eigenvalue calculations through post-processing eigenvalue data obtained from standard methods. Mathematical analysis of both schemes is presented. Concrete examples are also included and discussed.

欢迎大家参加！