## **ALGEBRA SEMINAR**

## Molecular vibration: group representation theory in chemistry and physics, III

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ABSTRACT: In the third lecture of this series, I will first derive the Euler-Langrange equations from Hamilton's principle of least action. Then I will describe the Lagrangian function of a closed system of particles; this will involve some more "principles" from physics. Finally, I plan to derive the equations of motion for the harmonic oscillator in several degrees of freedom.

> Monday, February 15, 2010 1:40 – 2:30 pm Room 617, Wachman Hall Department of Mathematics