ALGEBRA SEMINAR

Molecular vibration: group representation theory in chemistry and physics, I

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ABSTRACT: This series of lectures aims to explain some uses of group representation theory in chemistry and physics, specifically to the study of molecular vibration. The primary targeted audience continues to be graduate students, as last semester. I will try to provide sufficient background from physics/chemistry, symmetry groups, and group representation theory. Some of these topics are most certainly outside the limits of my own expertise; so I may try to enlist some help. In the first lecture, I plan to state the basic problem under consideration and explain some of the requisite material from mechanics.

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