Maria Gordini, University of Connecticut and Cornell

**Lie’s Third Theorem in Infinite Dimensions**

According to Lie’s third theorem any finite-dimensional Lie algebra is isomorphic to the Lie algebra of a connected simply connected Lie group. The existing proofs in finite dimensions use tools which are not applicable in infinite dimensions. We will look at several examples including infinite-dimensional Heisenberg groups and an infinite-dimensional orthogonal group to see how it can be done in infinite dimensions.

This talk is based on joint work with B. Driver, L. Gross, and S. Rajeev.

Thursday, April 8, 2010
at 4:25 PM in 406 Malott Hall

Refreshments will be served at 3:55 PM in the Mathematics Department lounge (532 Malott Hall).