

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research  
Department of Mathematics*

## **GEOMETRY SEMINAR**

### **The Batalin-Vilkovisky formalism of the spinning particle**

**Professor Ezra Getzler**  
Northwestern University

#### **Abstract**

We show that the axiom of Felder and Kazhdan on the vanishing of the cohomology groups in negative degree associated to solutions of the classical master equation in the Batalin-Vilkovisky formalism is violated by the spinning particle in a flat background coupled to  $D = 1$  supergravity. In this model, there are nontrivial cohomology groups in all negative degrees, regardless of the dimension of the spacetime in which the spinning particle is propagating.

Date: December 7, 2015 (Monday)

Time: 4:30 – 5:30pm

Place: Room 210, Run Run Shaw Bldg., HKU

*All are welcome*