THE UNIVERSITY   **OF HONG KONG**

Institute of Mathematical Research
Department of Mathematics

Geometry Seminar

Quotient of Deligne-Lusztig varieties

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Abstract

The Deligne-Lusztig varieties, introduced in the 70's, have been extensively used to study the representation theory of finite reductive groups (such as $GL_n(q)$, $O_n(q)$). However, understanding their geometry and computing their cohomology is a challenging problem.

I will present an inductive method to attack this problem. It relies on a particular decomposition of double Schubert cells, known as the Deodhar decomposition.

Date: May 9, 2011 (Monday)

Time: 3:00 – 4:00pm

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

All are welcome