



*Institute of Mathematical Research
Department of Mathematics*

LECTURES ON GEOMETRY

Rational Homogeneous Manifolds

Dr. Jaehyun Hong
Seoul National University, Korea

Abstract

A rational homogeneous manifold is a complex projective variety homogeneous under a complex semisimple group. The orbits of a Borel subgroup form a cell-decomposition; the closures of these cells are Schubert varieties. A main goal is to understand subvarieties having a certain type of homology class. In these introductory lectures we present some basic results on rational homogeneous manifolds and Schubert varieties, relating to this problem.

Lecture I:	October 7, 2010 (Thursday)	3:00 - 4:00pm
Lecture II:	October 11, 2010 (Monday)	4:00 - 5:00pm
Place:	Room 210, Run Run Shaw Bldg., HKU	

All are welcome