Queen's Algebraic Geometry
— Seminar —

CONSTRUCTION OF SIMPLE MODULES VIA COHOMOLOGICAL INDUCTION

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Abstract

Let g be a semisimple Lie algebra over the complex numbers and let k be a reductive in g subalgebra. Let p be a parabolic subalgebra of g. Cohomological induction produces a nonzero graded locally k-finite g-module from an appropriately chosen p-module. Under some very reasonable hypotheses one can extract simple g-modules as canonical submodules of cohomological induction modules. This work is joint with Ivan Penkov and is inspired by earlier work with David Vogan.

Monday, November 22, 2004
2:30pm – 3:30pm
422 Jeffery Hall