Gregg Zuckerman
(Yale University)
will speak on

Cohomological Induction
in the Representation Theory of Lie Algebras

Date: Monday, May 7, 2007
Time: 17:15
Place: Lecture Hall Research II, Jacobs University

Abstract:
Ordinary induction from a subalgebra to an algebra plays a fundamental role in
the representation theory of Lie algebras. However, in the theory of semisimple Lie
algebras over the complex numbers, the more general notion of cohomological in-
duction yields infinite dimensional modules which cannot be obtained by ordinary
induction. We will review this notion, starting with its inception in the late 1970’s
up to its recent applications to locally finite dimensional Lie algebras. Some refer-
ences include Vogan’s Representations of Real Reductive Lie Groups, and Knapp
and Vogan’s Cohomological Induction and Unitary Representations. See also our
joint work with Ivan Penkov at math.iu-bremen.de/penkov.

Colloquium Tea at ca. 16:45 in the Tea Room of Research II, close to the
lecture hall. Everybody is welcome!

M. Stoll