MATHEMATICS DEPARTMENT
North Carolina State University

ALGEBRA SEMINAR

Wednesday, April 13, 2005

Professor Kailash Misra

NC State University

Affine Lie Algebra Representations and Perfect Crystals

ABSTRACT: The crystal base theory developed by Kashiwara and independently by Lusztig provides an important combinatorial tool to study the representations of symmetrizable Kac–Moody algebras which includes affine Lie algebras. It is known that the crystal base for affine Lie algebras can be concretely realized as a subset of the semi-infinite tensor products of perfect crystals. In this talk we will present recently obtained perfect crystals for the affine Lie algebra $D_4^{(3)}$.

1:30 - 2:20 pm HA 370

Faculty and Students are invited to attend.