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THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PURE MATHEMATICS

K-theoretic analogues of Demazure crystals

by

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Abstract

Key polynomials are characters of Demazure modules of the Borel subalgebra. They are a non-symmetric extension of Schur polynomials which represent the cohomology of Grassmannians. Key polynomials can be written as generating functions over tableaux. One can find these tableaux using a combinatorial model known as Demazure crystals. Lascoux polynomials can be viewed as the K-theoretic analogue of key polynomials. We introduce an analogue of Demazure crystals, obtaining a tableau formula for Lascoux polynomials.

Date : 11 September 2024 (Wednesday)

Time : 2:00pm – 3:00pm

Venue : Room 4472 (Lifts 25/26)

All are Welcome!