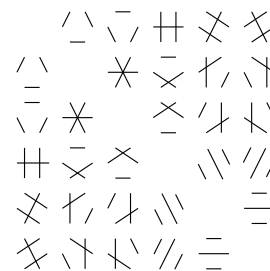# Mathematics Seminar

Rocky Mountain Algebraic Combinatorics Seminar

Horizontal-strip LLT polynomials

Foster Tom

UC Berkley (?)

Lascoux, Leclerc, and Thibon defined a remarkable family of symmetric functions that are q-deformations of products of skew Schur functions. These LLT polynomials $G_\lambda(x; q)$ can be indexed by a tuple λ of skew diagrams. When each skew diagram is a row, we define a weighted graph $\Pi(\lambda)$. We show that a horizontal-strip LLT polynomial is determined by this weighted graph. When $\Pi(\lambda)$ has no triangles, we establish a combinatorial Schur expansion of $G_\lambda(x; q)$. We also explore a connection to extended chromatic symmetric functions.

Weber 223
4–6 pm, Friday, Dec 3, 2021
(Refreshments 3:30–4 pm)
Colorado State University
Online via Zoom
`https://zoom.us/j/95321487441?pwd=Tlp4VG9pejZCekJmeDFFb1BzeWpsdz09`, Meeting ID: 953 2148 7441, Passcode: 722523
4 pm, Friday, Dec 3, 2021

This is a joint Denver U / UC Boulder / UC Denver / U of Wyoming / CSU seminar that meets biweekly.
Anyone interested is welcome to join us at a local restaurant for dinner after the talks.

Colorado State University

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