

HARVARD UNIVERSITY
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**Tuesday, January 12, 2021, at 10:00 (Boston)
15:00 (UK/Eire) 16:00 (C.Europe) 23:00 (China)
Mathematical Picture Language Seminar**

Zoom at: <https://harvard.zoom.us/j/779283357?pwd=MitXVm1pYUIJVzZqT3lwV2pCT1ZUQT09>

Stable Character Polynomials for Symmetric Groups
Christopher Ryba, University of California, Berkeley

Abstract: Schur functions serve as characters of representations of unitary (and general linear) groups; the multiplicative structure of Schur functions determines the fusion rules for representations of unitary groups. We will discuss an analogous family of symmetric polynomials for symmetric groups, and their construction in terms of Lie algebra cohomology. Although these polynomials have much in common with Schur functions, in some sense they are significantly more complicated. Finally, we will explain a connection to the 2D Heisenberg model.

