Algebra/Topology Seminar

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Multiline Queues
With Spectral Parameters

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3:00 p.m. in ES-143

ABSTRACT. The totally asymmetric simple exclusion process (TASEP) is a Markov process where particles move along a line and do not occupy the same site. Ferrari and Martin lifted this another process called multiline queues (MLQs) in order to compute the steady state distribution of TASEP on a ring. In this talk, we give a weighting on MLQs coming from the crystal interpretation due to Kuniba–Maruyama–Okado and show that it is invariant under a particular action of the symmetric group. The commutativity conjecture of Arita et al. follows as a corollary.