An analogue of the Robinson-Schensted-Knuth algorithm in affine type ${\cal A}$ Thomas Gerber

Abstract:

The Robinson-Schensted-Knuth (RSK) insertion procedure has a natural interpretation in terms of crystals in type A. In this talk, I make explicit a particular crystal isomorphism for Fock spaces representations of $\mathcal{U}_q(\widehat{\mathfrak{sl}}_e)$. This gives a combinatorial procedure generalising the RSK correspondence to the affine case.