

Fluctuations of arctic curves and the Tracy Widom distribution

Tuesday, 20 December 2022 18:15 (20 minutes)

Arctic curves in two-dimensional lattice models separate disordered regions from others whose degrees of freedom are frozen. A celebrated example is the so-called arctic circle in the six-vertex model. In this talk, I will analyze numerically fluctuations of the arctic curves in the six-vertex model and discuss their relation with the Tracy-Widom distribution. The latter arises in the context of random matrices theory when studying statistics of extrema. This is joint work with V. Korepin and I. Lyberg.

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