Random permutations, Gibbs measures and point processes

Nicolás Frevenza

Universidad de Buenos Aires - CONICET

We consider the space of permutations of a Poisson point processes in $\mathbb{R}^d$, and establish sufficient conditions for the existence and uniqueness of Gibbs measures on this space in the high temperature regime, associated to a general potential. We show that these measures are supported on finite cycle permutations.

Joint work with Inés Armendáriz and Pablo A. Ferrari.