## The Coulomb gas in two dimensions

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## Abstract

I will explain some of the recent work by Pierluigi Falco about the Coulomb system on a two dimensional lattice at the Kosterlitz-Thouless transition line. His results show, at low density, that the fractional charge correlations have the predicted power law decays with specific log corrections. First I will explain these terms and some open problems and then mention some critical parts of his proof.

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