

## **Statistical physics approach for one and two-dimensional log-gases**

Thomas Leblé, Courant Institute (NYU)

Log-gases are systems of particles with logarithmic interaction. They can be shown to coincide with the law of eigenvalues for certain random matrices, but are also interesting statistical physics models.

In the one-dimensional (Hermitian random matrix) case, the limit microscopic behaviour is known as the Sine-beta point process, whose definition involves stochastic analysis, I will mention a possible description of Sine-beta in physical terms.