

Remote talk - Random Regular Graphs and Critical Phenomena in the Forest (T: 50mn + Q: 10mn)

mercredi 11 mai 2022 14:00 (1 heure)

The partition functions of perturbed ensembles of random regular graphs (RRG) which discretize 2d surfaces and yield perturbed pure 2d quantum gravity will be discussed. The phase transitions for the RRG perturbed by the chemical potentials for short cycles will be demonstrated numerically. The new matrix model for the massive spinless fermions interacting with 2d quantum gravity is found and solved in planar approximation interpolating between $c=0$ and $c=-2$ cases. Some aspects of the localization and ergodicity of modes in this model will be clarified.

Orateur: Prof. GORSKY, Alexander (IITP RAS, MIPT)

Classification de Session: Afternoon chair: Ivan Kostov