Dispersion in infinite quantum systems

Mathieu Lewin

Abstract: In this talk I will present a model of Hartree type for a gas containing infinitely many particles, and I will discuss dispersive effects and return to equilibrium for large times. One fundamental tool is a new Strichartz inequality in Schatten spaces. Joint works with Rupert Frank (Caltech), Elliott H. Lieb (Princeton), Julien Sabin (Cergy) & Robert Seiringer (Vienna).