SÉMINAIRE

Mercredi 27 février 2019 à 11h15

Orme des Merisiers SPEC, Salle Itzykson, Bât.774

David DEAN

Laboratoire de Physique Théorique, IRSAMC, Université Paul Sabatier, Toulouse

STOCHASTIC DENSITY FUNCTIONAL THEORY FOR ELECTROLYTES OUT OF EQUILIBRIUM

The dynamics of interacting Brownian particles can be described by a stochastic equation for the density field.

I will show how the linearised version of this equation can be used to recover, very simply, certain of Onsager's results on electrolyte conductivity.

In addition I will show how it can analyse the out of equilibrium thermal Casimir effect between parallel plates containing Brownian charges, in particular the case where the plates are held at different temperatures and when an electric field drives a current in one of the plate.

A coffee break will be served at 11h00.