



ID de Contribution: 184

Type: **Talk**

Space-time correlations in turbulence

mardi 21 mars 2023 15:00 (30 minutes)

The problem of solving a strongly-coupled many-body system arises in classical fluid dynamics when turbulence fully develops. The statistical properties of the turbulent fluid are encoded in an infinite hierarchy of coupled equations which leads to what is called the “closure problem” of turbulence. The functional renormalisation group offers an efficient method to tackle this problem and achieve a controlled closure in the limit of large wavenumbers. I will present the principles of this approach and illustrate the results through comparisons with data from both direct numerical simulations and experiments.

Ref: L. Canet, Journal of Fluid Mechanics, Perspectives, 950, 1 (2022)

Orateur: CANET, Léonie (Université Grenoble Alpes)

Classification de Session: Tuesday 14:00-15:30

Classification de thématique: Cold Atoms