

Particles in turbulence

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Particles and droplets in turbulent flows are ubiquitous and key to many natural and industrial problems alike. In this talk I will review results concerning the phenomenology of particles transported in homogeneous and isotropic turbulence flows. The emphasis will be on the statistical properties from the small- to the large-scales, on the comparison between numerical and experimental investigation, on the development and validation of numerical models. I will specifically discuss the case of particles with different physical properties: from the case of neutral tracers to the case of finite-size deformable droplets.

References:

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