CEA - Saclay 91191 Gif-sur-yvette Cedex

Service de Physique de l'Etat Condensé SÉMINAIRE

Mercredi 15 fevrier 11h15

Orme des Merisiers SPEC Salle Itzykson, Bât.774

Two dimensional droplet microfluidics using "rails and anchors"

Charle Baroud

LadHyX and Department of Mechanics École Polytechnique

I will present our parallelized approach for droplet microfluidics by guiding and trapping microfluidic drops in a two-dimensional area. This contrasts with the current state of the art, where drops are treated in series, and thus simplifies the operation of the microfluidic devices. In addition to the microfluidic technological aspects, I will discuss the underlying fluid dynamics that determine the device performance and the flow fields that determine the mixing within the drops.

A coffee break will be served at 11h00. The seminar will be given in English.

Contact : patrice.bertet@cea.fr/sebastien.aumaitre@cea.fr –Tel : $+33\ 1\ 69\ 08\ 55\ 29\ /\ 74\ 37$ http://iramis.cea.fr/spec/