Christophe Josserand

Pressure on drops: what is the role of the surrounding gas

Drop impact is an emblematic and challenging problem of surface flows. While the dynamics was considered until recently mainly as a free surfacepproblem, it has been shown recently that the surrounding gas can trigger the splashing behavior. While different approaches have been proposed, the role of the surrounding air remains yet to be explained. I will present here different issues involved in this complex diphasic dynamics, using analytical arguments and numerical simulations.