

LadHyX Seminar – October 19, 10:45

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**The formation of waves by the wind: the effect of viscosity**

For more than a century, scientists have been trying to understand the appearance and amplification of the first waves by the wind. Is it a classic instability with a well-defined threshold and a critical wavelength? What is the role of turbulence and surface currents?

Most experiments, for obvious oceanographic reasons, use water as the liquid. But for the last ten years or so at FAST (Orsay) we have been studying the effect of an increase in the viscosity of the liquid, which has enabled us to come up with a number of answers and to highlight new phenomena: the existence of an initial regime of disordered deformations before wave amplification, a regime that can be short-circuited by localised forcing, the appearance of viscous solitons for highly viscous fluids, and so on. . .