LadHyX Seminar – December 14th, 10:45

Elise Lorenceau
(LIPhy, Grenoble)

**Separation of components from a gaseous mixture using aqueous foams**

Processes for separating gas mixtures using membranes are less energy-consuming than those based on thermal processes such as distillation. Two types of membrane can be distinguished: solid membranes with a highly selective exchange surface, but which can become clogged, and liquid membranes consisting of self-supporting thin soap films and continuously supplied with liquid, which can therefore be continuously regenerated. In this talk, we discuss the possibility of using aqueous foams as selective membranes to separate different gases. We propose an experimental approach to understand what determines the selectivity and separation rate of a gas mixture through soap films.