



COLLOQUIUM DI FISICA

Mercoledì 1° aprile 2015, ore 15.00
aula "A. Rostagni"

Prof. David Quéré

Ecole polytechnique and ESPCI, Paris, France

The shapes of water

ABSTRACT :

While its behavior at a large scale is dictated by gravity, water at the scale of drops (or bubbles) is rounded by the action of surface tension. Starting from old observations and historical experiments, we discuss how the shape of water can be tuned and manipulated for various applications, as often exploited in natural systems.

We present in particular how materials can be made anything between super-hydrophilic and

water repellent, and how self-propelling devices can be generated. Beyond their applied side, these situations are shown to generate new questions, often related to the understanding of the mobility of water at a small scale.

