

## “Measuring metastable water: stretched, supercooled, and both”

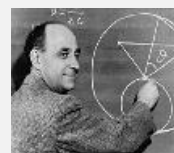
### PROGRAMME

11:30: Colloquium

13:00: Lunch with the speaker (all participants are invited at LENS)

## Enrico Fermi Colloquium

Friday 22 May 2015 11:30 am



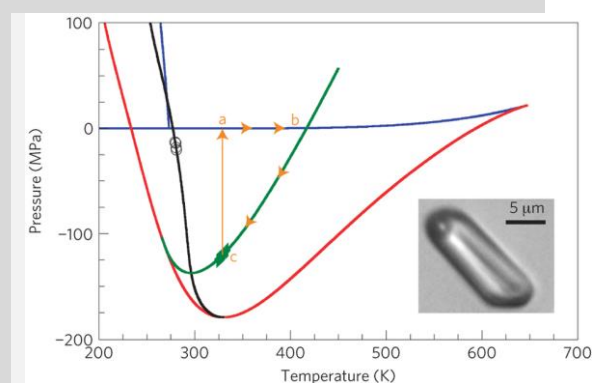
LENS - Via Nello Carrara 1

Sesto F.no (Firenze)

Conference room Querzoli



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**Université Claude Bernard**  
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### ABSTRACT

Ice floats on water. Liquid water expands upon cooling below 4°C. These (and many other) anomalies arise from the hydrogen bonds between the H<sub>2</sub>O molecules. They form a complex network, even more developed when the liquid is supercooled below its equilibrium freezing point. Simulations of supercooled water have suggested the intriguing possibility of a phase separation between two distinct liquid phases, but experimental evidence remains elusive.

In my talk, I will review our experimental work devoted to measuring properties of bulk metastable liquid water, supercooled and even stretched to negative pressures. Specifically, I will describe how we have obtained the equation of state of water down to -120 MPa, and its viscosity down to -34°C.

**Klein Colloquium by Sara Nocentini: "Optically tunable polymeric photonic devices"**

