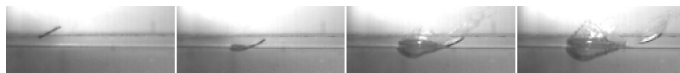


# PHYSICAL MATHEMATICS SEMINAR

**CHRISTOPHE CLANET**

Universités d'Aix-Marseille I et II, FRANCE

## **IMPACTS ON WATER: SKIPPING STONES AND TORPEDOES**

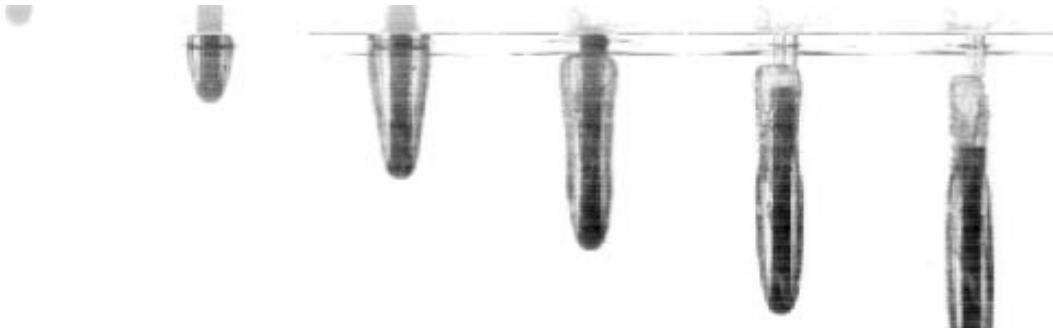


### **ABSTRACT:**

Impacts of solid bodies on water can either lead to a rebound on the interface (skipping stone limit) or to the creation of a transient air cavity (torpedo limit)

We first consider the skipping stone problem and identify the physical conditions for bouncing as well as the origin of the dissipation responsible for the end of the rebounds.

The second part of the seminar is dedicated to the torpedo's regime where we focus on the dynamics of the air cavity. We show that two different kinds of cavities can be created, depending on the limit condition achieved on the solid surface.



**TUESDAY, SEPTEMBER 12, 2006**

**2:30 PM**

**Building 4, Room 270**

*Refreshments at 3:30 PM in Building 2, Room 349  
(Applied Math Common Room)*



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