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Laboratoire PMMH
10 rue Vauquelin, 75231 Paris Cedex 05

ESPCI  PARIS
EDUCATION SCIENCE INNOVATION

Séminaire café - PMMH

Bureau d'Études, Batiment L, 2^{ème} étage

Jeudi 11 mai 2017, 13h30

Francesca Tesser

Post-doctorante au PMMH, ESPCI

Population dynamics under flow

The expansion of biological populations in natural environments is usually described as the combined effect of individual spatial dispersal and growth. In the case of aquatic ecosystems, the transport by flows can also be extremely relevant as an extra dispersal factor. In this seminar I shortly present some of the models that are currently used in this field. Then I present the experiment I have performed to quantify the expansion of colonies of *E. coli* bacteria in micro-channels, under both co-flow and counter-flow conditions. In particular I have measured the population front advancing speed at varying intensity of the imposed flow and I have compared these results to the case of classic advective-reactive-diffusive chemical fronts.

Prochain séminaire : jeudi 18 mai 2017 à 13h30,
Pierre Chantelot, doctorant au PMMH.

Programme des séminaires café : <https://www.pmmh.espci.fr/?-Seminaire-Cafe-Interne->
Contacts : Charles Duchêne (charles.duchene@espci.fr) et Armelle Gas (armelle.gas@espci.fr)