PHYSICAL MATHEMATICS SEMINAR

The uncertain trajectory of a pilot-wave

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ABSTRACT:

Our hydrodynamic model considers 2D surface wave equations coupled to the 3D droplet-trajectory system proposed by Molacek and Bush (2013). The wave dynamics starts from rest while the fluid domain is vibrated according to the Faraday theory. The interaction of two droplets has been considered. I will briefly review some of this work and discuss our recent 1D confined pilot-wave dynamics. In the high memory regime, when the pilot-wave is confined to bounded domains, uncertainty arises along the pilot-wave trajectory. Numerical examples of tunneling will also be presented.

TUESDAY, MARCH 31, 2015
2:30 PM
Building E18, Room 466A

Reception following in Building E17, Room 401A
(Math Dept. Common Room)

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