



Departamento  
de Matemática  
Aplicada



# Seminario de Matemática Aplicada

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## **Inverse problems in reynolds equations: new results and perspectives**

Reynolds equation describes the behavior of a the pressure of a fluid filling the gap between two surface in relative motion and close proximity. If the distance between both surfaces is known, the problem presents uniqueness of solutions under suitable assumptions in the geometry. If we allow to the surface to move with one, two or three degrees of freedom the coefficients of the equation depend indirectly of the solution, in that case Reynolds equation is copied to a Newtons second Law. We present results on existence of solutions for a range of parameters and some open problems.

**Organizado por el IMI y el Departamento de Matemática Aplicada,  
con la colaboración del grupo UCM MOMAT**

**Fecha: martes 21 de marzo de 2017**

**Hora: 11:00 horas**

**Lugar: Aula 209 (Seminario Alberto Dou)**

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