CMM PDE Seminar

Speaker: Noemi David (UCBL, Francia)

Title: Singular limits arising in mechanical models of tumor growth

Abstract: The mathematical modelling of cancer has been increasingly applying fluid-dynamics concepts to describe the mechanical properties of tissue growth. The bio-mechanical pressure plays a central role in these models, both as the driving force of cell movement and as an inhibitor of cell proliferation. In this talk, I will present how it is possible to build a bridge between models that have different pressure-velocity or pressure-density relations. In particular, I will focus on the inviscid limit from a visco-elastic model to a Darcy's law-based model, and the incompressible limit that links the latter to a Hele-Shaw free boundary problem with density constraint.

El link para acceder a la reunión de zoom: https://reuna.zoom.us/j/5602423930
ID de reunión: 560 242 3930

December 4, 2023 at 12 Santiago time.

Venue: Online via Zoom / Sala de Seminarios CMM 5th floor, Beauchef 851

For further information, see our webpage: **https://eventos.cmm.uchile.cl/pdeseminar/**