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CMM PDE Seminar

Speaker: Pablo D. Ochoa, Universidad Nacional de Cuyo, Argentina

Title: "Hopf's lemmas and boundary point results for the fractional p-Laplacian".

Abstract: In this talk, we will discuss different versions of the classical Hopf's boundary lemma in the setting of the fractional $p-$Laplacian, for $p \geq 2$. We will start with a Hopf's lemma based on comparison principles and for constant-sign potentials. Afterwards, we will present a Hopf's result for sign-changing potentials describing the behavior of the fractional normal derivative of solutions around boundary points. As we wiil see, the main contribution here is that we do not need to impose a global condition on the sign of the solution. Applications of the main results to boundary point lemmas and a discussion of non-local non-linear overdetermined problems will also be discussed.

This is a joint work with Dr. Ariel Salort (UBA).

Monday, September 30th at 12:10 pm.

Venue: DIM seminar room, Beauchef 851, 4th floor.

Zoom: https://uchile.zoom.us/j/96642349167?pwd=MkRVbWxzOFBUUXlCTWFicW0reWZ6dz09

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