

CMM PDE Seminar

Speaker: Erwin Topp (USACH), Chile.

Title: On large solutions for fractional Hamilton-Jacobi equations.

Abstract: In this talk I will report some multiplicity results for large solutions of fractional Hamilton-Jacobi equations posed on a bounded domain, subject to exterior Dirichlet conditions. We construct large solutions using the method of sub and supersolutions, following the classical approach of J.M. Lasry and P.L. Lions for second-order equations with subquadratic gradient growth. We identify two classes of solutions: the one coming from the natural scaling of the problem; and a one-parameter family of solutions, different from the previous, which can be formally described as a lower-order perturbation of blow-up fractional harmonic functions. Joint work with Alexander Quaas and Gonzalo Dávila (UTFSM-Chile).

Date: August 25, 2022 at 16:00 Santiago time.

Modalidad: Presencial en sala de seminarios del DIM, piso 5, o bien online via zoom:

<https://uchile.zoom.us/j/99723780077?pwd=a1YvUmFHdGd4VGIONnRTUjh3SmRSZz09>

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