
Barcelona Analysis Seminar 2022–2023

URL. <https://mat.uab.cat/web/seminarianalisi/>

Date. October 13, 2022

Time. 15:00 CET

Room. S02 FME (Universitat Politècnica de Catalunya)

Online streaming (Google Meet). [Click here to join.](#)

Nonlinear Diffusion Equations driven by Fractional Operators Semigroups, self-similarity and asymptotics

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We will review some basic models of nonlinear diffusion driven by nonlocal operators with and without free boundaries. Then we will present some lines of recent progress in the study of p -Laplacian evolution equations both of local or nonlocal type. Existence, regularity, self-similar solutions and asymptotic behaviour are discussed.

Reading reference

- [1] Juan Luis Vázquez, *The mathematical theories of diffusion: nonlinear and fractional diffusion*, Nonlocal and nonlinear diffusions and interactions: new methods and directions, 2017, pp. 205–278.