





DNATECH

2023 - 2024

Barcelona Analysis Seminar

Date: April 11, 2024 Time: 15:00 CET Room: UB T2 (Universitat de Barcelona)

## Degenerate equations on nodal sets and boundary Harnack principles

Stefano Vita Università di Torino

We discuss some regularity results for a class of elliptic equations with coefficients that degenerate or explode on the nodal set Z(u) of a given function u. This function is a solution to a uniformly elliptic PDE. The analysis is strongly influenced by the singular set of u. Some uniformity of the estimates is provided under bounds on the frequency function. This is a joint project with Susanna Terracini and Giorgio Tortone.