THE DIRICHLET PROBLEM ON INFINITE TREES

MATTEO LEVI

Trees in analysis are both a fruitful model for continuous problems and an interesting metric space per se. In this talk, we consider the Dirichlet problem on a locally finite tree of infinite depth, with no combinatorial restrictions, and we prove that the set of irregular points for continuous boundary data has zero capacity. We also give some uniqueness results for solutions in Sobolev $W^{1,p}$ of the tree. The talk is based on a joint work with Nikolaos Chalmoukis.

POLITECNICO DO TORINO
E-mail address: matteo.levi@polito.it