

# HARDY SPACES ON TREES WITH NONDOUBLING FLOWS

FEDERICO SANTAGATI

We will first define an atomic Hardy space in the setting of a tree endowed with a nondoubling locally doubling flow measure. We shall then illustrate a number of results extending the corresponding theory as known in the classical setting. In the particular case of the homogeneous tree, we show that the characterizations of the atomic Hardy space in terms of heat maximal operator and Riesz transform fail.

This is partially based on joint works with Matteo Levi, Anita Tabacco and Maria Vallarino.

POLITECNICO DI TORINO

*Email address:* federico.santagati@polito.it