

1154-28-1098

Vasileios Chousionis, Sean Li and Scott Zimmerman* (`scott.zimmerman@uconn.edu`).

Singular integral operators in Carnot groups.

The theory of singular integral operators has led to important discoveries in complex analysis and PDEs since the beginning of their modern treatment in the 1950's, and questions about the boundedness of these operators lie at the core of their study. In recent years, several mathematicians have revealed the deep interaction between the geometric structure of a set and the boundedness of singular integral operators on it. In this talk, we will explore several recent results generalizing these interactions to the setting of 1-dimensional sets in Carnot groups. (Received September 13, 2019)