

abstract

Computer Science/Discrete Mathematics Seminar II
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

A linear property of Banach spaces is called "local" if it depends on finite number of vectors and is invariant under renorming (i.e., distorting the norm by a finite factor). A famous theorem of Ribe states that local properties are invariant under (non linear) uniform-homeomorphisms, suggesting that local properties should have purely metric characterizations.

The Ribe program attempts to uncover explicit metric characterizations of local properties, and study them in the context of metric spaces. More broadly it attempts to apply ideas from Banach to general metric spaces.

We will discuss some of the highlights of this program that have applications to finite metric spaces. The talk will be introductory in nature and no specific prior knowledge of Banach space theory or finite metric spaces will be assumed.