

Gastvortrag

Donnerstag, 13. Oktober 2016
15.00 Uhr
Seminarraum II

Professor Ian Doust
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The asymptotic enhanced negative type of finite ultrametric spaces

Abstract:

Negative type inequalities arise in the study of embedding properties of metric spaces, but they often reduce to intractable combinatorial problems. In this paper we study more quantitative versions of these inequalities involving the so-called p -negative type gap. In particular, we focus our attention on the class of finite ultrametric spaces which are important in areas such as phylogenetics and data mining. These spaces are of p -negative type for all p .

Remarkably, one can write down the p -negative type gap for these spaces by just examining the sizes of the smallest non-trivial metric balls in these spaces. There are, however, many questions still open concerning these quantities.

This is joint work with Stephen Sanchez (UNSW) and Anthony Weston (Canisius).

Einladender: Reinhard Wolf