Mathematics Colloquium

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Metric functional boundaries of groups

Based on works of Busemann and Gromov, Anders Karlsson has proposed a theory of "metric functionals" on a general metric space, as a replacement for linear functionals when there is no linear structure. For discrete spaces, these identify with "horofunctions". We will discuss some aspects of these objects for "well suited" metrics on discrete groups. We are mainly interested in the interaction between the geometry and the algebraic properties of the group. For example, it seems that metric functionals are useful in studying the structure of "small" groups, and understanding the existence of (virtual) characters. I am not assuming familiarity with any of the above notions. This is based on joint works with Liran Ron-George.

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13:45 – 14:45

SR13, Architekturgebäde
Technikerstraße 21b