



**KURT GÖDEL RESEARCH CENTER FOR
MATHEMATICAL LOGIC**

UNIVERSITÄT WIEN

1090 WIEN, WÄHRINGER STRASSE 25

O.UNIV.-PROF. DR. SY-DAVID FRIEDMAN



INVITATION

LUCA MOTTO ROS
(University of Turin, Italy)

ULTRAMETRIC SPACES, ISOMETRY, AND ISOMETRY GROUPS

Abstract:

Gao and Kechris proposed in 2003 two somewhat related problems concerning ultrametric spaces, namely:

- 1) Determine the complexity of the isometry relation on locally compact Polish ultrametric spaces.
- 2) Characterize the Polish groups that are isomorphic (as topological groups) to the isometry group of some Polish ultrametric space.

We will present a construction strictly relating ultrametric spaces and a special kind of trees which helps in tackling these two problems. This technique applies to both separable and non-separable complete ultrametric spaces, and allows us to e.g. show that they are unclassifiable up to isometry even when considering only discrete spaces. (Joint work with R. Camerlo and A. Marcone.)

THURSDAY, MARCH 30, 2017

Tea at 3:30pm in the KGRC meeting room (room 104)

Talk at 4:00pm in the KGRC lecture room (room 101)

GÖDEL RESEARCH CENTER

JOSEPHINUM, 1090 WIEN, WÄHRINGER STRASSE 25



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