KURT GÖDEL RESEARCH CENTER FOR MATHEMATICAL LOGIC

UNIVERSITÄT WIEN

1090 WIEN, WÄHRINGER STRASSE 25

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

INVITATION

YANN PEQUIGNOT
(KGRC)

FROM WELL TO BETTER, THE SPACE OF IDEALS

Abstract:

A well quasi-order (wqo) is a well-founded quasi-order which contains no infinite antichain. The theory of wqos has applications in many contexts and consists essentially of developing tools in order to show that a certain quasi-order suspected to be wqo is indeed so. This theory exhibits a curious and interesting phenomenon: to prove that a certain quasi-order is wqo, it may very well be easier to show that it enjoys a much stronger property. This observation may be seen as a motivation for considering the complicated but ingenious concept of better-quasi-order (bqo) invented by Nash-Williams in 1965.

After a motivated introduction to the concept of bqo, I will sketch the proof of a conjecture made by Pouzet in 1978 which states that any wqo whose ideal completion remainder is bqo is actually bqo. The proof relies on a result with both a combinatorial and a topological flavour concerning maps from a front into a compact metric space.

This is joint work with Raphaël Carroy.

THURSDAY, MARCH 3, 2016
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

o.Univ.-Prof. Dr. Sy-David Friedman