

## Cohen-Harper-Levy model

The Cohen-Harper-Levy model was introduced by D. Pincus and K. Prikry in the paper “*Luzin sets and well ordering the continuum*”, *Proc. Americ. Math. Soc.* 49 (2), 1975, pp. 429-435 and they has proved that in such the model there is a Luzini set. The main result of above mentioned works was that, the existence of a Luzin set in ZF does not imply the existence of a well-ordering of the reals. In our talk will be presented join work with the Prof. Ralf Schindler. In the work is studied some paradoxical subsets of the real line, in particular we consider the Vitali set, the Bernstein set and the Sierpinski set and their properties in Cohen-Harper-Levy model.