ASCENDING PATHS AND LARGE ANTICHAINS IN PRODUCTS

PHILIPP LÜCKE

Abstract. The notion of an ascending path through a tree of uncountable regular height directly generalizes the concept of a cofinal branch through such a tree. It can be used to provide examples of such trees that are non-special in a very absolute way. In my talk, I will discuss several results dealing with the existence and non-existence of trees containing ascending paths of small width. Then I will present an application of these results showing that the question whether weak compactness is characterized by the infinite productivity of the corresponding Knaster property is independent of the axioms of ZFC.

Mathematisches Institut, Rheinische Friedrich-Wilhelms-Universität Bonn, Endenicher Allee 60, 53115 Bonn, Germany
E-mail address: pluecke@uni-bonn.de