

# A version of $\kappa$ -Miller forcing

Frau Prof. Dr. Heike Mildenerger  
Universität Freiburg

Abstract:

For a  $\kappa$ -version of Miller forcing, in addition to superperfectness one usually requires limits of length  $< \kappa$  of splitting nodes being splitting nodes as well and that splitting means splitting into a club. In joint work with Shelah we investigate a version of  $\kappa$ -Miller forcing where this latter requirement is waived. We show: If  $\text{cf}(\kappa) > \omega$  and there is a  $\kappa$ -mad family of size  $2^\kappa$ , then this variant of Miller forcing is related to the forcing  $([\kappa]^\kappa, \supseteq)$  and collapses  $2^\kappa$  to  $\omega$ .