Young Set Theory Workshop 2011 Königswinter, Germany, March 21 – 25

► ASSAF RINOT, Around Jensen's square principle

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Jensen's square principle for a cardinal λ asserts the existence of a particular ladder system over λ^+ . This principle admits a long list of applications including the existence of non-reflecting stationary sets, and the existence of particular type of trees.

In this talk, we shall be concerned with the weaker principle, *weak square*, and the stronger principle, *Ostaszewski square*, and shall study their interaction with the classical applications of the square principle.

We shall isolate a non-reflection principle that follows from weak square, and discuss tree constructions based on Ostaszewski squares. We shall present a rather surprising forcing notion that may (consistently) introduce weak square, and discuss a coloring theorem for pairs of ordinals, based on minimal walks along Ostaszewski squares.