

**Speaker:** Pandelis Dodos.

**Title:** High-dimensional random arrays. Structural decompositions and concentration.

**Abstract:** A  $d$ -dimensional random array is a stochastic process indexed by the set of all  $d$ -element subsets of a set  $I$ . We shall discuss the structure of finite, high-dimensional random arrays, with finite valued entries (e.g., boolean) whose distribution is sufficiently symmetric. Specifically, we shall focus on the following interrelated problems: concentration and distributional decompositions.

This is joint work with Kostas Tyros and Petros Valettas.