

**Speaker:** [O.M. Shalit](#) (Technion, Haifa)

**Title:** *CP-semigroups and dilations, subproduct systems and superproduct systems*

**Abstract:** In a joint work with Michael Skeide, we introduce a framework for studying dilations of semigroups of completely positive maps on C\*-algebras. The heart of our method is the systematic use of families of Hilbert C\*-correspondences that behave nicely with respect to tensor products: these are product systems, subproduct systems and superproduct systems. Although we developed our tools with the goal of understanding the multi-parameter case, they also lead to new results even in the well studied one parameter case. In my talk I will give a broad outline of our work.

Based on <https://arxiv.org/abs/2003.05166>.