



# ANALYSIS SEMINAR

## DILATIONS OF KERNELS VALUED IN CONTINUOUS MAPPINGS BETWEEN PRE-LOCALLY $C^*$ -ALGEBRAS

By

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**Abstract:** In the 2004 article Type I Product Systems of Hilbert Modules Barreto et al. define the notion of a completely positive semidefinite kernel valued in the bounded mappings between pre- $C^*$ -algebras and prove a dilation theorem for such kernels, which is a useful result tool in proving many other results and also it generalizes Paschke's dilation theorem.

In this talk we will state and prove a version of their theorem in the larger category of locally  $C^*$ -algebras. Applications will be discussed as time permits.

**Date:** December 11, 2018

**Time:** 16:00

**Place:** SA141 Mathematics Seminar Room

\* Tea and cookies will be served before the talk. All are most cordially invited.