# TEMPLE UNIVERSITY

Department of Mathematics

## Analysis Seminar

Room 617 Wachman Hall

Monday, March 27th, 2023, 2:30 p.m.

### *Extrapolation of completely monotone functions*

by Yury Grabovsky

Temple University

**Abstract:** Completely monotone functions (CMF) are Laplace transforms of positive measures. I will discuss the question of extrapolation of completely monotone functions from a given interval to the entire positive semiaxis from practical point of view. Specifically, if we found a CMF that is epsilon close to a given CMF on the interval, then to what extent can we be sure that the values of our CMF approximate that of a given CMF outside of the interval? Please come to learn what CMFs are, see theorems from your Real Analysis course in action, and enjoy a cool piece of Functional Analysis.