Speaker: Bruno Predojević

Title: L^p contractivity for semigroups generated by elliptic operators

Abstract: We begin by a short recap of semigroup theory and then proceed to study geometry of closed convex sets in Hilbert spaces. We, then specialize this theory to L^2 spaces over some measure space $(\Omega, \mathcal{F}, \mu)$ with emphasis on results by R. Nittka from 2012. The last part of the talk will focus on applying this abstract theory to concrete differential operators as well as connections to p-ellipticity introduced by A. Carbonaro and O. Dragičević.