Speaker: Selwyn Ng

Title: Structures and categoricity computable without delay

Abstract: We study the notions of structures and categoricity which are computable without delay. There are several ways one can formalize this, we adopt an approach taken by Cenzer and Remmel. We call such structures fully primitive recursive (fpr). We compare the situation between classical (computable) structure theory and fpr structures. In many cases we show that the analogous results do not hold for fpr structures. We describe fpr categorical structures in many common algebraic classes. We also discover the surprising fact that there exists an fpr categorical structure that is not computably categorical. This is joint work with Iskander Kalimullin and Alexander Melnikov.