Speaker: Jan Reimann

Title: Randomness vs definability hierarchies

Abstract: We discuss how the presence of a stratified internal definability structure presents a very general obstacle to randomness. The basic examples are the arithmetic hierarchy in computability theory and the constructible hierarchy in set theory. We present two basic computability theoretic lemmas and then show how to transfer these ideas to the set theoretic realm using an arithmetic "wrapper" for Jensen's fine structure analysis of the constructible universe. This is joint work with T. Slaman.