Speaker: Ethan McCarthy

Title: Cototal enumeration degrees and the Turing degree spectra of minimal subshifts

Abstract: A subset $A$ of $\omega$ is cototal under enumeration reducibility if $A$ is enumeration reducible to \( 2^{\omega} \setminus A \), that is, if the complement of $A$ is total. We show that the e-degrees of cototal sets characterize the e-degrees of maximal anti-chain complements, the e-degrees of enumeration-pointed trees on \( 2^{\omega} \), and the e-degrees of languages of minimal subshifts on \( 2^{\omega} \). Finally, we obtain a characterization of the Turing degree spectra of nontrivial minimal subshifts: they are the enumeration cones of cototal sets.