

**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.