Speaker: Denis Hirschfeldt

Title: On and around coarse reducibility

Abstract: A coarse description of a set $X$ is a set $D$ that agrees with $X$ except on a set of asymptotic density zero. This concept leads to natural notions of coarse reducibility, which are among several notions of robust information coding that have been studied recently. I will discuss various recent results on coarse reducibility and related notions, focusing on the degree structures arising from them, as well as on connections with algorithmic randomness, effective genericity, and other concepts from computability theory. This is joint work with Eric Astor, Carl Jockusch, Rutger Kuyper, Tim McNicholl, and Paul Schupp, in various combinations.