Well orderings of graphs

Reed Solomon

University of Connecticut, USA

Abstract: There are two natural types of well orderings of countable graphs that are commonly used in graph theory. A dominating order describes how the graph can be built in an ordinal number of stages in which each node is dominated when it enters the graph. A dismantling order describes how a graph can be taken apart in an ordinal number of stages in which each node is dominated when it is removed. This talk will survey recent results on the complexity of dominating and dismantling orders on computable graphs and give some connections to games on graphs.