

Speaker: Linda Westrick

Title: The Dual Ramsey Theorem and the Property of Baire

Abstract: The Dual Ramsey Theorem (DRT) is a variation of Ramsey's theorem where one colors k -element partitions of ω , and where a homogeneous object is a partition of ω into infinitely many pieces, such that every coarsening of it down to k pieces is colored the same. The space to be colored is a subset of k^ω and only Borel colorings are considered. The reverse math strength of the DRT is unknown. We distinguish between the topological and computational complexity of a Borel coloring. By varying them separately, we give a clear analysis of the strength of several sub-cases of the DRT, and state the remaining open questions in simplified terms. This is joint work with Damir Dzhafarov, Stephen Flood and Reed Solomon.