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John Maharry* (maharry@math.ohio-state.edu) and **Neil Robertson**. *Topological Ideals and Well-Quasi Orders*.

In 1986, Neil Robertson conjectured that a graph ideal J closed under topological inclusion is a well-quasi order if and only if J includes only finitely many doubled circuits and doubled rooted paths. These two families of graphs, doubled circuits $2C_k$ and doubled rooted paths $2P_k$, form an antichain under topological inclusion. In this talk we discuss the first steps toward proving this conjecture and give a possible roadmap for the complete proof. (Received January 16, 2012)