

First Joint Meeting Brazil Italy of Mathematics

Special Session: Mathematical Logic

Rio de Janeiro, August 29 - September 02, 2016

Title: Topological Games and Chain Conditions

Authors: Santi Spadaro (Universidade de São Paulo, Brazil)

Abstract: We apply topological games to obtain partial ZFC solutions to a few old problems in topology. For example, we show that every linearly ordered space satisfying the game-theoretic version of the countable chain condition is separable (which is related to Suslin's Problem) and that in every compact space satisfying the game-theoretic version of the weak Lindelof property, every cover by G_δ sets has a continuum-sized subcollection with a G_δ -dense union (which is related to an old still open question of Arhangel'skii).