DICHOTOMIES FOR OPEN DIHYPERGRAPHS
ON GENERALISED BAIRE SPACES

PHILIPP SCHLICHT

The open graph dichotomy for a subset X of the Baire space $^\omega\omega$ states that any open graph on X either contains a large complete subgraph or admits a countable colouring. It is a definable version of the open colouring axiom for X and generalises the perfect set property. Feng (1993) proved this dichotomy for analytic sets and this was recently generalised to infinite dimensions by Miller, Carroy and Soukup (2020). I will talk about extensions of this result to generalised Baire spaces and applications. This is a joint project with Dorottya Sziraki.