TETSUYA ISHIU, Miami University

The Mardešić Conjecture for Countably Compact Spaces

We shall outline the proof that for all positive integers d and s, if Z_j is an infinite Hausdorff space for each $j < d + s$ and $\prod_{j<d+s} Z_j$ is a continuous image of a countably compact subspace of the product of d-many compact linearly ordered topological spaces, then there are at least $s+1$-many indexes $j < d+s$ such that Z_j is compact and metrizable. This theorem is a strengthening of the Mardešić Conjecture, which was proved by G. Martínez-Cervantes and G. Plebanek in 2019, but it was proved by a completely different method.