

1116-05-1137 **Richard Hammack** and **Wilfried Imrich*** (imrich@unileoben.ac.at). *Products of almost locally finite graphs.*

The Cartesian product of connected infinite graphs is well understood, but other products of infinite graphs are rather intractable in general.

In this talk we consider almost locally finite graphs, that is, graphs where any two vertices have at most finitely many neighbors, and study the strong, the direct and the lexicographic product. Our focus is on prime factorizations, the structure of the automorphism group, vertex- and edge-transitivity and the distinguishing number.

The main tool is the Cartesian skeleton of graphs, which allows to reduce many problems about strong and direct products to the Cartesian product. (Received September 17, 2015)