Splittable and unsplittable graphs and configurations

Nino Bašić

University of Primorska & IMFM, Slovenia

We show that there exist infinitely many splittable and also infinitely many unsplittable cyclic (n_3) configurations. Moreover, we present a complete study of trivalent cyclic Haar graphs on at most 60 vertices with respect to splittability. Finally, we show that all cyclic flag-transitive configurations with the exception of the Fano plane and the Möbius-Kantor configuration are splittable.

This is joint work with Jan Grošelj, Branko Grünbaum and Tomaž Pisanski.