

Seminario de Grafos

Speaker: George Kontogeorgiou (CMM)

Title: Separating the edges of a graph with linearly many subdivisions of K_4 .

Abstract: Let G be a graph. As we recall from Ana's talk, a set S of subgraphs of G is (strongly) separating if for every ordered pair of edges (e, f) in $E(G)^2$ there exists a subgraph H in S that contains e but not f . Although we traditionally view S as a set of paths, other kinds of separating sets have also been considered. Recently, Botler and Naia proved that every graph can be separated by a set S of subdivisions of K_4 (and lone edges, which are necessary for covering bridges), such that the size of S is a linear function of $|V(G)|$. This mirrors the corresponding theorem about path separation. We will go through a sketch of the proof and explain the importance of this result in the grand scheme of separating systems.

Friday 18th at 10.00, 7th floor, Room John von Neumann.

