## Disjoint paths in planar graphs

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## Abstract

Let G be a planar network and let there be terminals (nodes)  $s_i t_i$ ,  $i=1,2,\ldots,k$ . Suppose also there is a fractional multicommodity flow that sends at most one unit of flow for any pair, and a total flow of F between the terminals. Then we can find a subset of  $\Omega(F)$  of the demands that can be routed with O(1) (at most 4 at this point) congestion on each edge.

Joint work with C. Chekuri, S. Khanna.