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*$K_5$ -subdivisions in 5-connected nonplanar graphs.*

Kuratowski's theorem states that a graph is planar iff it contains no subdivision of  $K_5$  or  $K_{3,3}$ . Seymour and independently Kelmans conjectured in the 1970s that every 5-connected nonplanar graph contains a subdivision of  $K_5$ . We show that this is true when the graph contains  $K_4^-$  as a subgraph. We also show that why excluding  $K_4^-$  is useful. Joint work with Jie Ma. (Received January 20, 2011)