Tutte's edge 3–Coloring Conjecture

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Tutte conjectured in 1966 that every 2–connected cubic graph with no minor isomorphic to the Petersen graph is edge 3–colorable. The conjecture implies the Four Color Theorem by a result of Tait.

In the first part of the lecture I will discuss related results and problems. In the second part I will outline a proof of Tutte's conjecture obtained in joint work with N. Robertson, D.P. Sanders and P.D. Seymour.