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Four-coloring P_6 -free graphs

I will present a polynomial-time algorithm for the 4-coloring problem restricted to the class of graphs with no induced six-vertex path, proving a conjecture of Huang. Combined with previously known results this completes the classification of the complexity of the 4-coloring problem for graphs with a connected forbidden induced subgraph.

Joint work with Maria Chudnovsky and Mingxian Zhong.