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Bounding the chromatic index: Exploiting and sidestepping structure

One can prove Reed's omega, Delta, chi conjecture for line graphs by exploiting structure in a straightforward way. For a local strengthening of the conjecture, a very different approach is needed. In this talk I will discuss these two proofs as well as theorems that, at least for the original conjecture, let us sidestep the structure of line graphs altogether.

Joint work with Maria Chudnovsky, Matthieu Plumettaz, and Paul Seymour.