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Matchings, coverings, and Castelnuovo-Mumford regularity

I will use a theorem of Kalai and Meshulam to calculate (or at least bound from above) the Castelnuovo-Mumford regularity of the edge ideal of a graph G . The bounds will come from covers of the edges of G by subgraphs whose complements are chordal. I'll also show how such a covering can be obtained from, for example, any maximal matching.