

Degrees and Trees

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You might think that it is impossible to talk for 50 minutes about degree sequences of trees. We will aim to do this, starting with some elementary (and, hopefully, new and interesting) exercises suitable for a first graph theory course and moving to more substantial results. We will examine degree sequences of multitrees and multiforests, 2-multitrees, partial 2-trees and edge colored trees, and discuss how ‘close’ to a multitree we can get with degrees of a multigraph. Time permitting we will look at a degree problem for edge colored bipartite graphs that appears in multiple forms.