

Small Phylogenetic Trees

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Abstract: One purpose of a phylogenetic tree is to reconstruct the evolutionary relationship between multiple species given an aligned DNA sequence. Small trees, trees with less than 5 'leaves', can be found in the website "Small Phylogenetic Trees". This website is a supplement to the book Algebraic Statistics for Computational Biology and contains algebraic information on the phylogenetic trees. Each tree is modeled with up to four models, which include the Newman 2-state model (N71), the Jukes-Cantor (JC69), the Kimura 2-parameter (K80), and the Kimura 3-parameter (K81) models.