

Conditions for Bimodality and Multimodality of a Mixture of Two Unimodal Densities

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Abstract: Conditions for bimodality of mixtures of two unimodal distributions are investigated in some special cases. Based on general characterizations, explicit criteria for the parameters are derived for mixtures of two Cauchy, logistic, Student, gamma, log-normal, Gumbel and other distributions.

Keywords: bimodality; unimodality; multimodality; mixture of two unimodal distributions;

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