

Department of Decision Sciences

Statistics Seminar

On the stick-breaking representation for Gibbs-type priors

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Abstract

Random probability measures are the main tool for Bayesian nonparametric inference, given their law acts as a prior distribution. Many well-known priors used in practice admit different, though (in distribution) equivalent, representations. Some of these are convenient if one wishes to thoroughly analyze the theoretical properties of the priors being used, others are more useful in terms of modeling and computation. As for the latter purpose, the so-called stick-breaking constructions certainly stand out. In this talk we focus on the recently introduced class of Gibbs-type priors and provide a stick-breaking representation for it.