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ON A CLASS OF BAYESIAN NONPARAMETRIC ESTIMATES: II. HAZARD RATE ESTIMATES

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Abstract. The Bayes estimation of hazard rates for a family of multiplicative point processes is considered. We study the model for which a hazard rate can be linearly parametrized by a freely varied measure. The weighted gamma process is assumed to be the prior distribution of this measure; the posterior distributions and the posterior means are given in explicit forms. Examples of the evaluation of posterior means are given.

Key words and phrases: Bayesian method, hazard rates, gamma process.