

These are my beliefs! Am I serious? Certainly not!  
(Some heresy about Bayes).

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We consider the Bayesian analysis of a few complex, high-dimensional models and show that intuitive priors, which are not tailored to the fine details of the data model and the estimated parameters are going to fail in situations in which simple good frequentist estimators exist. The models we consider are: biased sampling, partial linear model, estimating linear and quadratic functionals of a white noise models, and estimating with stopping times. We present a strong version of Doob's consistency theorem which claims that the existence of a uniformly  $\sqrt{n}$  consistent estimator ensures that the Bayes posterior is  $\sqrt{n}$  consistent for values of the parameter with prior probability 1. We argue that there is no contradiction between these conflicting findings.

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This is joint work with Bickel, Gamst, and Kleijn