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Noncentral r-priors

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While the Bayesian Information Criterion (BIC) and Akaike
Information Criterion (AIC) are powerful tools for model selection in linear regression, they can fail dramatically in low signal to noise situations. We shall argue that this is caused by the implicit choice of priors underlying these criteria. Analysing these priors in the context of an expanded model-plus-noise space, we design more appropriate priors and a derive from them a new "Noncentral Information Criterion" which inherits the good properties of the BIC and AIC but performs better than both.

Apply to be
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No

Level for award
 (Hons, MSc,
   PhD, N/A)?

N/A

Would you like to <br> submit a short paper <br> for the Conference
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No

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