



**Sixth Bayesian, Fiducial, and Frequentist (BFF6)  
Conference on Model Uncertainty  
April 28, 2019 – May 1, 2019**

**SPEAKER TITLES/ABSTRACT**

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“Statistical Sparsity”

The talk is concerned with a particular definition of statistical sparsity as a stochastic limit. The limit definition is satisfied by every example that has been proposed in the literature on sparse signal detection, so, in that sense it is uncontroversial. Nonetheless, the definition has implications for sparse signal detection. For example, it puts very specific limits on the types of inferential questions (integrals or conditional expectations) that we can hope to address. It also implies that certain pairs of sparse models are first-order equivalent, or effectively equivalent.

(Joint work with Nick Polson)