

Bayesian inference and forward modeling

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This lecture will introduce Bayesian inference, and especially its role in relation to forward modeling of measurement systems, from magnetics to tomographic inversions. A conceptual introduction to Bayesian inference will be given together with a number of examples of diagnostic and physics applications in the field of plasma physics. At both Wendelstein 7-X and JET a number of diagnostic systems are analyzed in this way and some results from these experiments will be presented and discussed.