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# Fully Bayesian Forecasts with Neural Bayes Ratio Estimation

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Sensitivity forecasts inform the design of experiments and the direction of theoretical efforts. To arrive at representative results, Bayesian forecasts should marginalize their conclusions over uncertain parameters and noise realizations rather than picking fiducial values. However, this is typically computationally infeasible with current methods for forecasts of an experiment's ability to distinguish between competing models. We thus propose a novel simulation-based methodology utilizing neural Bayes ratio estimators capable of providing expedient and rigorous Bayesian model comparison forecasts without relying on restrictive assumptions.

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