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## Bayesian Analysis for Extracting Properties of the Nuclear Equation of State

*Saturday 21 September 2019 11:00 (30 minutes)*

We perform a Bayesian analysis for selecting the most probable equation of state under a set of constraints from compact star physics, which now include the tidal deformability from GW170817. It was considered a two-parameter family of hybrid equations of state, which produces a third family of hybrid stars in the mass-radius diagram. We present the corresponding results for compact star properties like mass, radius and tidal deformabilities and use empirical data for them in Bayesian analysis method to obtain the probabilities for the model parameters within their considered range.

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