Contribution ID: **70**   Type: **Poster**

Emulation of Cosmological Observables under Model Misspecification in the Era of Petascale Cosmology

The modeling of cosmological observables becomes increasingly complex and we need to rely on computationally costly computer models for scalable inference. I will present a current project on advancing current emulation efforts to include functional input like selection functions into the emulation. In particular I will highlight opportunities to include Machine Learning models into the emulator design and discuss the impact of model misspecification error on emulation and inference. I will summarize the basic problem and present prior work and proposals to mitigate the issue.

Primary Field of Research

Astro/Cosmo

Author: RAU, Markus Michael

Presenter: RAU, Markus Michael