Summary

- Functional metrics provide a global measure of the difference of a function in terms of amplitude and phase
- Integrated elastic functional metrics into Bayesian Model Calibration framework utilizing aligned data and shooting vector representation
- Demonstrated ability on simulated and tantalum equation of state calibration problems
- Future Work
 - Additional testing on real world examples

Papers

D. Francom, J. D. Tucker, J. G. Huerta, K. Shuler, and D. Ries, "Elastic Bayesian Model Calibration", arXiv:2305.08834 [stat.ME], in revision, 2023.

J. Brown, J. P. Davis, J. D. Tucker, J. G. Huerta, and K. Shuler, "Quantifying uncertainty in analysis of shockless dynamic compression experiments on platinum, Part 2: Bayesian model calibration", Journal of Applied Physics, accepted 2023.