Data-driven methods for machine-induced metrology errors

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This project focuses on the study of machine-induced systematic errors, with the end goal of developing algorithmic solutions for their correction by:

- Exploring approaches such as regularization, Bayesian neural network to suppress the hardware induced error
- Studying data augmentation and generative ML/DL methods to build an effective response filter that can be calibrated upfront without additional measurements.
- Dynamic error correction: Explore state estimation methods to model the dynamical error and remove it from the measurements on the fly