

Title: Ensemble Kalman-like methods for inference and sampling

Abstract: The talk will survey ensemble Kalman-based methods from the perspective of coupling of measures, interacting particle systems and affine variance. In addition to the standard Bayesian perspective, a frequentist perspective on the implied estimators will be discussed. Recent extensions of the ensemble Kalman filter to sampling methods based on the principles of invariance of measures and ergodicity will also be sketched out.