

Séminaire de Probabilités et Statistique

Mardi 16 novembre à 14h00

Salle Fizeau (5ème étage)

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*Approximate Gaussian process regression as early stopping
problem*

This talk will be about a method to fit Gaussian process regression models to large datasets from only a subset of the data. The novelty of this approach is that the size of the subset is selected on the fly during inference with little computational overhead. This is achieved by monitoring probabilistic bounds on the model evidence that tighten as more data is processed. Remarkably, these bounds are largely composed of terms that appear in intermediate steps of the standard Cholesky decomposition, allowing to adaptively stop the decomposition once enough data have been observed.