

A Linear-Time Kernel Goodness-of-Fit Test

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Time **Friday, Sept 27, 2019 at 10:00**

Place **Campus Belval, MNO 5A (fifth floor)**

This talk will be based on the work of Wittawat Jitkrittum, Wenkai Xu, Zoltan Szabo, Kenji Fukumizu, Arthur Gretton, which the authors won the best paper award for in NIPS 2017. Therein, a novel adaptive test of goodness-of-fit is proposed, with computational cost linear in the number of samples. The test features that best indicate the differences between observed samples and a reference model are learned by minimizing the false negative rate. These features are constructed via Stein's method, meaning that it is not necessary to compute the normalising constant of the model. Many appealing properties of the test are proved theoretically and shown to work in experiments.