ID de Contribution: **50** Type: **Non spécifié**

Learning new physics with a (kernel) machine

lundi 4 mars 2024 16:55 (25 minutes)

The New Physics Learning Machine is a methodology to perform a model-independent and multivariate likelihood ratio test powered by machine learning (arXiv:2305.14137). I will present its implementation based on kernel methods, which is extremely efficient while maintaining high flexibility (arXiv:2204.02317). After outlining the general framework, I will discuss recent results on model selection for improved chances of detection and present applications to model-independent searches of new physics, online data quality monitoring (arXiv:2303.05413), and the evaluation of generative models.

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Classification de Session: Contributed