

# **Machine Learning for Gravitational waves. Deep learning methods to study the noise of interferometers**

*Thursday, June 14, 2018 10:00 AM (30 minutes)*

Noise of non-astrophysical origin contaminates science data taken by the Advanced Laser Interferometer Gravitational-wave Observatory and Advanced Virgo gravitational-wave detectors. Characterization of instrumental and environmental noise transients has proven critical in identifying false positives in the first observing runs. Machine-Learning techniques have, in recent years, become more and more reliable and can be efficiently applied to our problems.

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**Session Classification:** Machine Learning