



Contribution ID: 44

Type: Oral

”Physics of Data”, an innovative master programme in Physics

Monday, November 4, 2019 2:00 PM (15 minutes)

Most of the challenges set by modern physics endeavours are related to the management, processing and analysis of massive amount of data. As stated in a recent Nature editorial (*The thing about data*, Nature Physics volume 13, page 717, 2017), “the rise of big data represents an opportunity for physicists. To take full advantage, however, they need a subtle but important shift in mindset”. All this calls for a substantial change in the way future physicists are taught: statistics and probability, information theory, machine learning as well as scientific computing and hardware setups should be the pillars of the education of a new physics students generation. This is what an innovative master programme launched in fall 2018 by the University of Padua, “**Physics of Data**“, aims at. This contribution summarises its actual implementation, describing the educational methods (all focused on “hands-on” activities and research projects) and reporting on the brilliant results obtained by the first enrolled students.

Consider for promotion

Yes

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Session Classification: Track 8 – Collaboration, Education, Training and Outreach

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