Cosmology 2023 in Miramare



Contribution ID: 12 Type: not specified

Mining the Universe

Monday 28 August 2023 10:30 (30 minutes)

In the upcoming decade, scientists will face significant new challenges in the field of Cosmology: experiments will observe our Universe collecting an unprecedented amount of data, which must be analyzed with an extraordinary level of precision in order to interpret them and efficiently extract valuable information for data-driven discoveries . Cosmology therefore represents the perfect playground for the application of machine learning techniques, which, as a matter of fact, are undertaking an impressive growth in this field. In this talk I will summarize some of these applications and the most promising results obtained so far, with a particular focus on the use of Neural Networks in the study of the Cosmic Microwave Background.

Presenter: KRACHMALNIKOFF, Nicoletta

Session Classification: Opening and Plenary Session - Chair Fabrizio Nesti