



COLLOQUIA DI DOTTORATO, A.A. 2021/2022

Dipartimento di Fisica, A102
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Einstein Telescope: A look at the dawn of the Universe

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LIGO and VIRGO have opened a new way to observe the Universe through the detection of Gravitational Waves. The potentialities of this new field of research are immense. Black Hole physics, Neutron Star studies, Multimessenger astronomy, Nuclear Astrophysics, Cosmology.....

We have to move now from the observation of a bunch of events, the discovery phase, to the ability of detecting so many of them in order to have a complete description of the landscape. A new, much more powerful interferometer, is needed. In this seminar, the effort that will bring to the construction of a third generation instrument, Einstein Telescope, is described together with its physics reach.