

”Investigating test mass parameters for the Einstein Telescope interferometer ”

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“The ambitious Einstein Telescope (ET) project aims to provide an up-close examination of gravitational waves originating from sources near the birth of the Universe. This study’s objective is to investigate parameter specifications for the interferometer’s mirrors, including the level of surface distortion necessary for the detector to operate at the required sensitivity.

To achieve this, we start with a suitable set of surface maps from Advanced LIGO and Advanced Virgo as a foundation. These maps are used to generate virtual mirror maps representations, which in turn become the basis for optic simulations representing ET’s behavior. The ultimate goal is to refine the mirror requirements and optimize the pathway for ET’s mission.”

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