

DOCTORATE SCIENCES AND TECHNOLOGIES OF CHEMISTRY AND MATERIALS

RESEARCH THEME (LANCET PROJECT)

Deposition and characterization of amorphous coating materials for the cryogenic mirrors in Einstein Telescope

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As part of the LANCET project funded by the Ministero dell'Università e della Ricerca under the program Fondo Italiano per la Scienza (FIS3 – Starting Grant), this PhD position is announced on the topic: Deposition and characterization of amorphous coating materials for the cryogenic mirrors in Einstein Telescope.

The research theme focuses on the deposition of amorphous silicon and silicon nitride thin films with the aim to obtain optical coatings of very high purity. A multi-technique characterization protocol will be developed and used to optimize deposition, so that the optical absorption of those coatings is minimized. The reduction of optical absorption in amorphous silicon and silicon nitride is instrumental towards the developments of high-reflective mirrors for the Einstein Telescope.

For further details concerning the research theme, please contact: michele.magnozzi@unige.it.