

COLLOQUIA DI DOTTORATO, A.A. 2024/2025

A101, Dipartimento di Fisica Giovedì 3 aprile 2025 ore 16:00

The physics of habitable worlds

Amedeo Balbi

(Università degli Studi di Roma "Tor Vergata")

The study of habitable worlds has become a central focus in modern astrophysics, propelled by the discovery of exoplanets, the search for life beyond Earth, and the quest to understand the conditions necessary for supporting life. This colloquium will provide an overview of the current state of the art in this highly interdisciplinary field, emphasising the intricate balance of factors that determine planetary habitability. Key physical principles such as stellar properties, atmospheric composition, climate dynamics, and the influence of galactic environments will be discussed, along with the methods used to assess and characterize these conditions across a range of exoplanets.