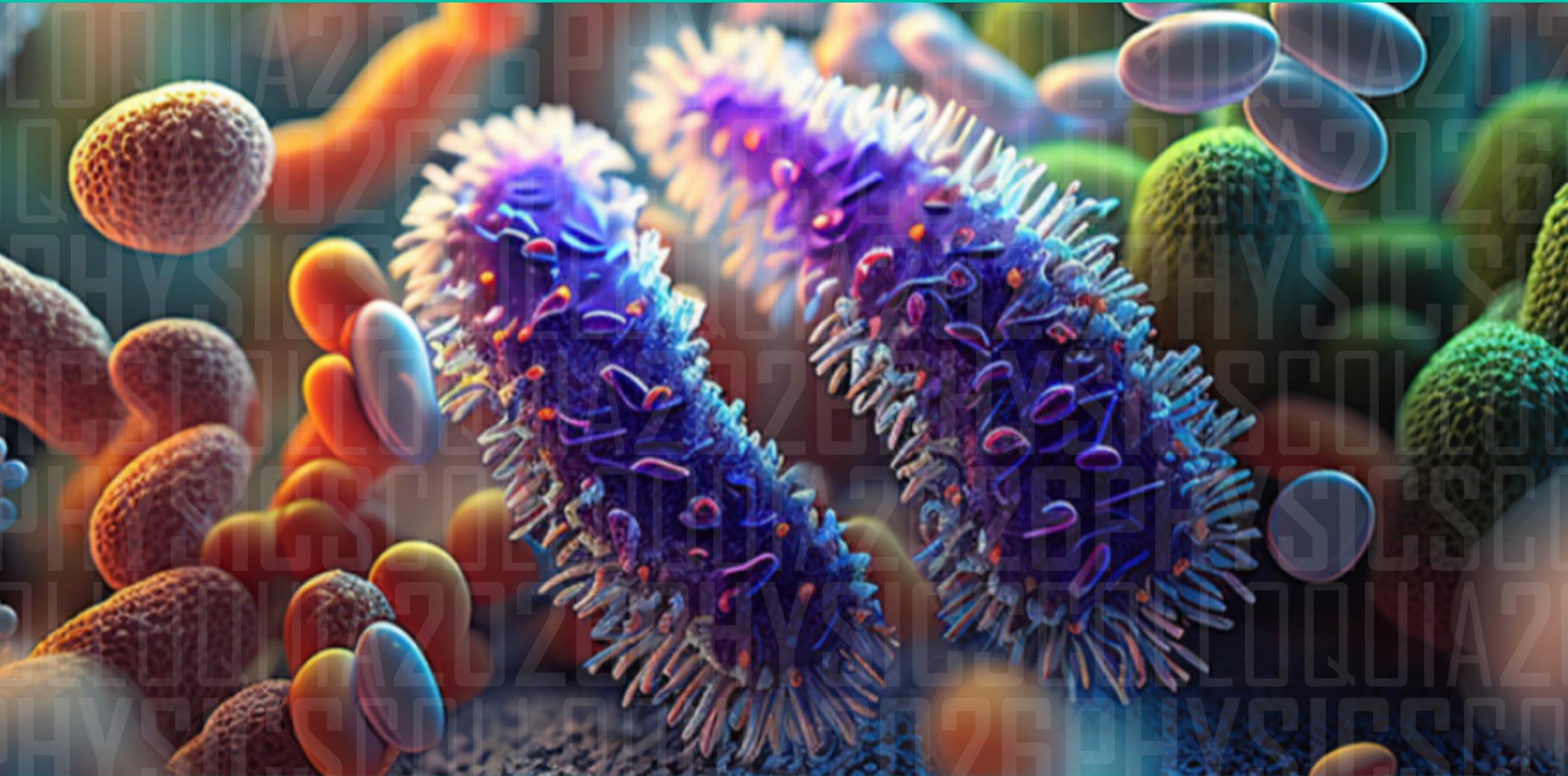


PHYSICS COLLOQUIA 2026



Microbiomes are intricate, dynamic communities of microorganisms that influence nearly every aspect of life. In this talk, I will outline the main challenges in explaining their collective behavior and summarize recent results suggesting universal regularities in species abundance patterns. I will discuss how interactions and non-trivial correlations shape community-level outcomes, and how microbial interaction networks often exhibit a balanced structure -- one that seems to be perturbed in dysbiotic states linked to disease. Many fundamental questions are still unresolved, positioning microbial network complexity as a rich and rapidly developing field.

APR
14

MIGUEL ÁNGEL MUÑOZ MARTÍNEZ | Universidad de Granada
**THE NETWORKED MICROBIOME:
COLLECTIVE DYNAMICS, BALANCE, AND BREAKDOWN**

2:30 p.m. | **CLASSROOM A** | Via Celoria 16 | Milan



UNIVERSITÀ DEGLI STUDI DI MILANO
PhD in Physics, Astrophysics and Applied Physics

DEPARTMENT OF PHYSICS
via Celoria 16 | 20133 MILAN
ph. +39 02 50317740
<http://phd.fisica.unimi.it> | phd@fisica.unimi.it