



AVVISO DI SEMINARI

Il giorno 30/06/2026 alle ore 11:00
nell'Aula Grassano del Dipartimento di Fisica

Prof. Chunhai Fan

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Terrà un seminario dal titolo:

DNA-Based Molecular Machines

Proponente: Prof. A. Porchetta & Prof. F. Ricci

DNA-Based Molecular Machines

DNA is well known to be a genetic molecule with double helix structures. DNA is evolved in nature to follow a simple and precise Watson-Crick pairing rule to encode enormous genetic information in living things. Nevertheless, DNA is not only a carrier of genetic information, but can be regarded a type of molecular information materials. DNA molecules have been exploited as a building block to encode various types of structures that are not present in nature. More recent advances show that nucleic acids-based information materials are increasingly being used for applications including bioimaging, drug delivery and micro-nano fabrication. In this talk I will introduce the use of nucleic acids-based information materials for developing molecular machines.

SHORT BIO

Chunhai Fan is a K. C. Wong Chair Professor at Shanghai Jiao Tong University, New Cornerstone Investigator (NCSI), Dean of the School of Chemistry and Chemical Engineering, and Executive Director of the National Center for Translational Medicine. He is a member of the Chinese Academy of Sciences, the World Academy of Sciences (TWAS), Academia Europea and the Chinese Academy of Medical Sciences. He is also a fellow of AAAS/RSC/AIMBE/ISE. He is an Associate Editor of JACS-Au, and serves as a Co-Chair on the editorial board of ChemPlusChem and an editorial board member of over 10 journals including Cell Biomaterials, Angewandte Chemie, Accounts of Chemical Research and ACS Nano. Dr. Fan has published more than 900 papers in peer-reviewed journals (with ~100, 000 citations and H-index 150), and been recognized as Highly Cited Researchers by Clarivate Analytics since 2014. His work has been recognized by many awards including National Natural Science Prize of China (2016), The Ho Leung Ho Lee Foundation Prize for Scientific and Technological Innovation (2019), Advances in Measurement Science Lectureship Award in American Chemical Society (2019), Rozenberg Tulip Award (2025), and Humboldt Research Award (2026).

