

# BIO-TALK: Multifunctional nanostructured sensors in living cells

DR. FRANCESCO DE ANGELIS

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12:30 to 13:30

Seminar Room

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In the last 10 years we developed different classes of optical and electronic nanostructured sensors and we investigated their interactions with cells and tissues. In particular, we interfaced human electrogenic cells (neurons and cardiomyocyte) with 3D multifunctional nanostructures so to control and to monitor cellular activities through a multiomic approach. Still in the field of biosensing, we are currently working to combine plasmonic nanopores with Raman Spectroscopy for protein and RNA identification at single molecule level. In a longer term, these research directions may converge to enable single molecule investigations in real time in living human tissues.

**Hosted by:** Prof. Dr. Michael Krieg