

Politecnico di Milano, Classroom C.I.1 (Building 6)

Thursday, 28th March, 2019 – 14:00

Light Scattering and Emission from Hetero-structures

Andrea Carlo Ferrari

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Heterostructures based on layers of atomic crystals have a number of properties often unique and very different from those of their individual constituents and of their three dimensional counterparts. The combinations of such crystals in stacks can be used to design the functionalities of such heterostructures. I will show how Raman spectroscopy can be used to fingerprint such heterostructures, and how these can be exploited in novel light emitting devices, such as single photon emitters, and tuneable light emitting diodes.

About the speaker:



Andrea Ferrari is Professor of nanotechnology at the University of Cambridge and a Fellow of Pembroke College. He graduated in Nuclear Engineering at Politecnico di Milano. He founded and directs the Cambridge Graphene Centre and the Engineering and Physical Sciences Research Council Doctoral Training Centre in Graphene Technology. He chairs the management panel and is the Science and Technology Officer of the 1Billion Euros European Graphene Flagship. He is a Fellow of the American Physical Society, Fellow of the Materials Research Society, Fellow of the Institute of Physics, Fellow of the Optical Society and he has been recipient of numerous awards, such as the Royal Society Brian Mercer Award for Innovation, the Royal Society Wolfson Research Merit Award, the Marie Curie Excellence Award, the Philip Leverhulme Prize, The EU-40 Materials Prize. He has also received 5 European Research Council Grants. He is the "Top Italian Scientist in Material & Nano Sciences" according to the VIA-Academy rankings. He has over 370 papers with over 96,000 citations, with an H index of 105.

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