

University of Modena and Reggio Emilia
PhD School “ Nano- and Physical Sciences”

Opening session

March 31th, 2006
11:30 room E - Physics Dept.

lectio magistralis

Electromagnetic vacuum energy and dispersion forces

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Electromagnetic forces between neutral objects, like van der Waals and Casimir forces, are experimental consequences of the properties of the vacuum state of the electromagnetic field. A discussion is given on the origin of these forces, their range and behaviour as a function of geometrical and material parameters. The connection between dispersion forces and electromagnetic field modes is illustrated, suggesting possible fields of investigation.

The Director

Prof. Sergio Valeri