

Course Title	FLUCTUATIONS INDUCED PHENOMENA
Instructor	Roberto Passante
N° of hours	15
Description	Introduction to field fluctuations in the presence of material bodies and related physical phenomena
Contents	<ul style="list-style-type: none">• Macroscopic Quantum Electrodynamics• Matter-assisted field quantization• Vacuum fluctuations and Casimir effect for dispersive and dissipative materials• Casimir-Polder interactions between atoms and dielectric macroscopic bodies• Casimir-Polder interactions for excited atoms and many-body effects