





## **SEMINAIRE ISMO**

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## Nanophotonics with surface plasmons

Surface plasmons are hybrid electron/photon modes at metal surfaces that can be spatially confined to the nanoscale. Advances in both experiment and theory and the promise of novel applications have recently strongly boosted the interest in plasmonics in a variety of fields as near field optics, surface enhanced spectroscopy, metamaterials and sensor technology.

I will, first, discuss metal nanoparticle and nanowire geometries to control plasmonic modes, their interaction with elementary emitters [4] and how to probe plasmons with high spatial resolution. Second, I will outline options towards active plasmonic devices with an emphasis on organic optoelectronic materials for direct plasmon excitation and detection.

Jour inhabituel Jeudi 18 février 2010 à 11 h 00 Bibliothèque du Bât 351 - 2è étage Université Paris-Sud 91405 ORSAY Cedex