



香港浸會大學

HONG KONG BAPTIST UNIVERSITY

FACULTY OF SCIENCE

**Department of Physics &
Institute of Computational and
Theoretical Studies**

JOINT COLLOQUIUM

**The sub nanoscale optical response of
plasmonic materials**

BY

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4:00pm – 5:00pm (Tea will be served)

T716, Science Tower, HSH Campus

Abstract

In optics we generally describe a material by its electrical permittivity. Sometimes the permittivity is dispersive and depends strongly on frequency, as is the case for metals, but usually it is assumed to be independent of wave vector. This assumption works well on the scale of the wavelength of light, but current experiments on nanostructured materials challenge this assumption. Theorists are still debating the correct model permittivities observed at the sub nanoscale. I shall discuss the theories, how they can be implemented to calculate optical properties, and how they also have consequences for the Van der Waals interactions and heat transfer between nanoparticles.

All Interested Are Welcome!