

The logo for GEMaC features the text 'GEMaC' in a large, bold, sans-serif font. The letters are dark grey. Behind the text, there are several thin, light grey lines that curve and sweep across the page, creating a sense of motion or light rays. Below the main text, the full name of the group is written in a smaller, bold, sans-serif font.

# GEMaC

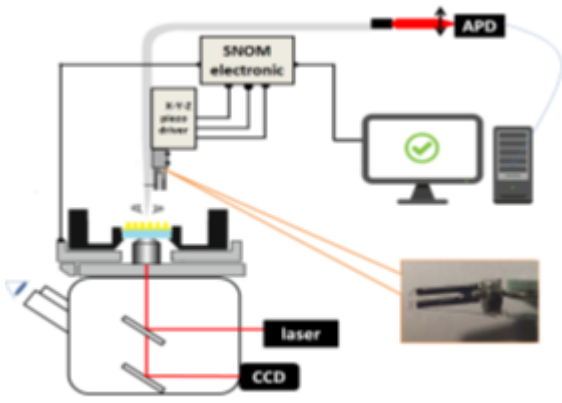
**Groupe d'Étude  
de la Matière Condensée**

## **NEAR-FIELD OPTICAL MICROSCOPY**

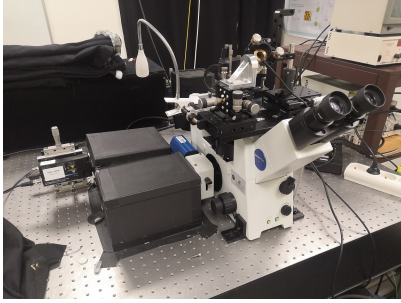
We use a SNOM (Scanning Near-field Optical Microscope) composed of a reversed Olympus 70 microscope and a near-field head from NTMDT company. This model is an aperture SNOM, based on shear-force feedback.

It is possible to perform experiments in different configurations : reflection or transmission, local collection or illumination. It can be associated with different light sources (CW laser, pulsed laser, laser diode) and/or different detection device (spectrometer, APD, PMT).

The detection system is linked to a photon counting device which allows statistical analysis of the collected photons.



*Scheme of the SNOM experimental setup*



*Picture of the experimental setup*