Instituto de Astronomía
Universidad Nacional Autónoma de México
Sede Ensenada, Baja California, México

Seminario de Investigación

Miércoles, 14 de Diciembre de 2012
13:00 hrs, Auditorio IA-Ensenada

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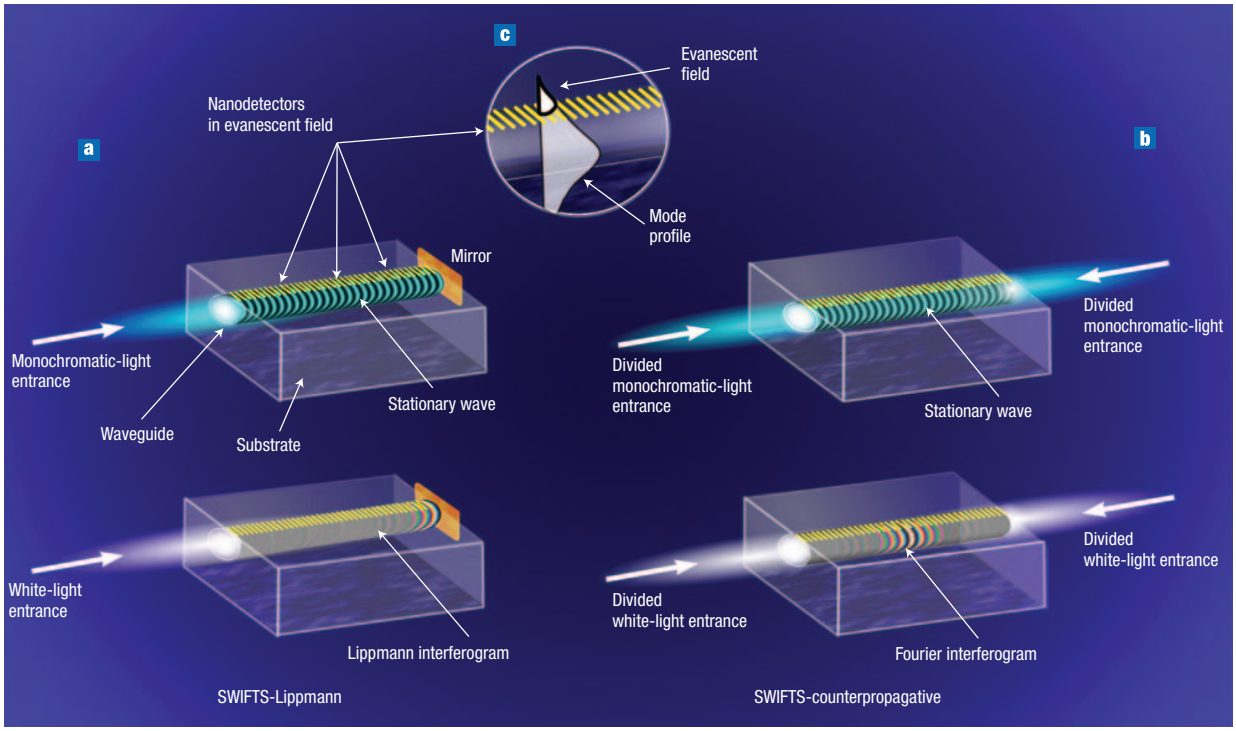
(Observatorio de Grenoble, Francia)

"SWIFTS, A VERY SMALL SPECTROMETER"



SWIFTS (Stationary Wave Integrated Fourier Transform Spectrometer) is a new family of spectrometers based on a very promising integrating technology. It is an original way to fully sample the Fourier interferogram obtained in a waveguide by either a reflection (SWIFTS Lippmann) or counter-propagative (SWIFTS Gabor) interference phenomenon. The sampling is simultaneously done without any moving part thanks to "nano-detectors"located in the evanescent field of the waveguide. It allows a dramatic reduction of the size and the weight of spectrometers while conserving, even improving, their performances such spectral resolution. Here, we present the development status of this new kind of spectrometers and the some results obtained with functional prototypes in various domain.