CMP Seminar

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Noise processes at the nanoscale, large-scale optomechanics and nanoresonator applications

CEA LETI has extensive background in silicon nanomechanical resonators for sensing, culminating with the first start-up for chemical sensing with NEMS in 2012. These applied achievements have required large scale technological efforts, but also more fundamental studies such as non-linear dynamics and noise processes at the nanoscale. Subsequent works led to the development of an efficient system for NEMS-based neutral Mass Spectrometry analysis. In the last 6 years, the group worked on the development of optomechanical resonators, with the objective to make their use as mainstream as their electrical counterparts. The first single-particle mass spectrometry measurements with optomechanical resonators will be shown, as well as the first biological studies directly in liquid with such devices.

Friday, October 25th, 2019 at 10:00 a.m.
Room: 4270 BPS Bldg.
Host: Mark Dykman