From:	Gerrits, Thomas (Fed)
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Subject:	fortnightly Tuesday meetings - Tuesday 9.30am/11.30am
Date:	Monday, February 11, 2019 2:32:56 PM

Hi All,

After a long delay, we are re-starting our video meetings tomorrow.
Gaithersburg will meet in (b) (6) (11.30 am). Boulder will meet in (b) (6) (9.30 am).

Our first speaker of the year is Javier Sabines, who recently joined Alan's group.

Title: Twin-beam sub-shot-noise raster-scanning microscope with a hybrid detection scheme
Abstract: Harnessing the unique properties of quantum mechanics offers the possibility to deliver new technologies that can fundamentally outperform their classical counterparts. These technologies only deliver advantages when components operate with performance beyond specific thresholds. Twin-beam parametric sources like SPDC or FWM can deliver sub-shot noise performance in absorption estimation if the combined channel loss of the system is below 50%. In this talk I will discuss how including an optical delay and an optical switch in a feed-forward configuration reduces the detector efficiency required to enable sub-shot noise absorption estimation when using a twin beam source.

See you!
Thomas

Our Tuesday meetings folder:
Tuesday meetings