

THE PHYSICS COLLOQUIUM

Thursday 24 April 2025, 4:00 p.m.
Nijenborgh 4, Lecture Hall 5111.0080

Advances in Broadband Saturation Spectroscopy: Towards Probing New Physics in the Mid-Infrared

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Broadband precision spectroscopy of rovibrational transitions holds promise for tracking periodic variations in fundamental constants. Such variations may offer evidence supporting the existence of ultralight dark matter and indicate new physics.

This seminar provides an overview of our efforts in achieving broadband saturation spectroscopy in the mid-infrared. Our focus lies on crystalline super mirrors, featuring a cavity finesse surpassing 400,000, and low-noise high-power frequency combs generating Watt-level output power.

Join us for coffee starting 3:30 p.m. Refreshments will be served after the lecture.

For more information contact the host: Maxim Pchenitchnikov (m.s.pchenitchnikov@rug.nl)

Website: <http://www.rug.nl/research/vsi/colloquia/>