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The Vienna Doctoral Programme on Complex Quantum Systems  
invites you to a

## Seminar Talk

by

**Thibaut Sylvestre**

*Optics Department, FEMTO-ST Institute*

### ***Surface Brillouin scattering in optical microfibers***

Brillouin light scattering in optical fibres is a fundamental interaction between light and sound with important implications ranging from optical sensors to slow and fast light. In conventional optical fibres, light both excites and feels shear and longitudinal bulk elastic waves, giving rise to forward-guided acoustic wave Brillouin scattering and backward-stimulated Brillouin scattering. Here we demonstrate a new type of Brillouin scattering from surface acoustic waves in both tapered and photonic crystal microfibers. This effect may prove interesting for applications to optical sensing that can exploit surface acoustic waves, or for precise metrology of optical micro and nanofibers.

**Monday, 4 April 2017,  
17:00 get-together with coffee and snacks!**

Atominstitut, Stadionallee 2, 1020 Vienna

Hosted by: Philipp Schneeweiß



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