

Tuesday 12 April, [Michael Pircher](#) Polarization sensitive optical
2pm (Ingram Lecture [\(Medical University](#) coherence tomography and adaptive
Theatre) [of Vienna\)](#) optics optical coherence tomography

In this seminar two extensions of optical coherence tomography (OCT) that have been investigated at the Medical University of Vienna are covered. Polarization sensitive OCT allows for enhanced contrast which can be used to distinguish between different tissue types: Polarization preserving tissue, birefringent tissue and depolarizing tissue. The basic concept of PS-OCT is presented together with corresponding applications of the technique. Adaptive optics is used to improve the transverse resolution in retinal imaging systems. The technique can be combined with different imaging modalities such as scanning laser ophthalmoscopy or OCT. Basic principles are explained and imaging results showing smallest retinal cells such as rod photoreceptors are presented.