

IQSE AMO QO Seminar Series

Tuesday, November 22nd, 11:30 am ZOOM &
IQSE seminar room (MPHY 578)

Pizza will be served for IQSE members at 11:00 am. The talk will start around 11:30 am

Dr. Aart Verhoef

(TAMU)

Recent developments for agri-biophotonics research

ABOUT THE SPEAKER: Dr. Verhoef is assistant professor at the department of Soil and Crop Sciences at Texas A&M University. Since 2002 he has worked on high-resolution XUV spectroscopy, laser development, attosecond physics and nonlinear optics and microscopy. His mission at Texas A&M University is to accelerate translation of optical technology to plant biology and agriculture.

EVENT DETAILS: Advances in optical technology are driving breakthrough developments in many areas of research. In our lab, we develop novel optical methods and apply these address questions in biological and agricultural research. Three examples will be presented. First, we use Raman micro-spectroscopy to measure the regulation of nutrients in roots. Second, we develop super-resolution multiphoton microscopy modalities to achieve sub-diffraction-limited-resolution deep-tissue imaging, and finally we use of engineered beam shapes allows to achieve high-resolution optical coherence tomography for morphological sub-surface phenotyping of seeds.

ZOOM information:

<https://tamu.zoom.us/j/98156251523?pwd=QVdSdGxtL1UyY0g1L083SU5QR0QrUT09>

Meeting ID: 981 5625 1523

Passcode: 297578

One tap mobile

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