

School of Biological Sciences College of Science

Seminar:

Observing three-dimensional biological specimens with light sheet-based fluorescence microscopy (LSFM) under near-natural conditions

Date: 21 June 2019

Time: 4 p.m.

Venue: Classroom 1, SBS

Hosted By: Prof. Peter Török, A/P Li Hoi Yeung

Prof Stelzer is a world leading scientist who invented Light Sheet Microscopy which led to significant advances in developmental biology by permitting for the first time to image three-dimensional specimens in real time. Also a coinventor of 4pi microscopy, his research interests cover biophysics, physics. physical biology, biophotonics. biomechanics, cell and developmental biology and optical physics. Until 2011 he was a group leader at the European Molecular Biological Laboratory heading the microscopy unit where he developed various imaging techniques, before moving to his current positon at the Bunchmann Institue for Molecular Life Sciences, Goethe Universität Frankfurt am Main, Germany. Some of his other contributions include the optical tweezers based photonic force microscope in 1993 and a novel approach to laser based cutting devices in 1999. Dr Stelzer worked extensively on image processing, databases for volume data sets, theoretical aspects of image formation, optical levitation and optical tweezers and the biophysical properties of microtubules.



Professor Ernst H.K. Stelzer Bunchmann Institue for Molecular Life Sciences, Goethe Universität Frankfurt am Main