



Institute colloquium

## Computational single-photon imaging

**Gordon Wetzstein (Stanford University)**

**Host: Bernd Bickel**

Time-of-flight imaging and LIDAR systems enable 3D scene acquisition at long range using active illumination. This is useful for autonomous driving, robotic vision, human-computer interaction and many other applications. The technological requirements on these imaging systems are extreme: individual photon events need to be recorded and time-stamped at a picosecond timescale, which is facilitated by emerging single-photon detectors. In this talk, we discuss a new class of computational cameras based on single-photon detectors. These enable efficient ways for non-line-of-sight imaging (i.e., looking around corners) and efficient depth sensing as well as other unprecedented imaging modalities.

**Monday, June 24, 2019 04:00pm - 05:00pm**

IST Austria Campus Raiffeisen Lecture Hall, Central Building



This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station. Please find a schedule of the IST Shuttle on our webpage: <https://ist.ac.at/en/campus/how-to-get-here/> The IST Shuttle bus is marked IST Shuttle (#142) and has the Institute Logo printed on the side.