

Workshop
"Structured Light and its Applications"
TU Braunschweig, June 12th 2024

Workshop program

9:25 – 9:30	Welcome Andrey Surzhykov and Peter Lemmens
9:30 - 10:00	Singular modes of light in dynamic random media David Bachmann (Uni Freiburg)
10:00 -10:30	Propagation of vector beams in magnetized atomic media Riaan Philipp Schmidt (PTB) and Richard Aguiar Maduro (Uni Glasgow)
10:30 - 11:00	Chiral/helical Bessel beams Jamal Berakdar (Uni Halle)
11:00 - 11:30	Coffee pause
11:30 – 12:00	Simulating Twisted Light Propagation and Applications using Raman scattering Denis Ukolov, Silvia Müllner, and Peter Lemmens (TU Braunschweig)
12:00 – 12:30	Twisted light emitted by photonics integrated into an ion trap Markus Kromrey (PTB)
12:30 – 13:00	The Talbot effect for Twisted Light (online) Robert Fickler (Uni Tampere)
13:00 – 14:00	Lunch
14:00 – 14:30	First quantum communication experiment in Lower Saxony Jingzhong Yang (Uni Hannover)
14:30 – 15:00	Interaction of vector light beams with atoms in a time-dependent magnetic field Shreyas Ramakrishna (Helmholtz Institute Jena)
15:00 – 15:30	Coffee pause
15:30 – 16:00	Scattering of twisted electrons on atoms Stephan Fritzsche (Helmholtz Institute Jena)
16:00 – 16:30	A numerical study of high angular momentum vortex electron beams in crystals Christian Bick (PTB)