

Seminar on Computational Laser Systems (Measurement Systems Seminar/BIOLAS), WS 2025/2026

Date: Tuesday, 4. DS., 13:00 – 14:30, BAR I88 (regular seminar, extra dates are in red)

Date	CW	Lecturer	Topic
14 Oct.	42	Dr. R Kuschmierz / J Dremel / Dr. L Büttner	Introduction to the Seminar & Presentation of Topics for Students
20 Oct., 12:00, BAR 17	43	Shiyue Chen	All-in-One Diffractive Neural Networks for Multidimensional Optical Input Processing (SA defense, supervision QZ)
21 Oct.	43	Wuming Zheng Yuezhen Xu	Force Prediction in optical trapping using Neural Networks (intermediate report, supervision DK), ZOOM Optimization of phase coding mask for Ultrasound Imaging (Diploma defense, supervision ZD), ZOOM
22 Oct., Wednesday, 8:00	43	Svea Steuer, TUD	Zoom, Zoom Meeting (Passcode: Laser1#) Tentative title, „Novel OCT techniques for biomedicine: Insights into the fiber architecture of the human tympanic membrane by visualizing the depth-resolved optic axis orientation“
24 Oct, Friday, 8:00	43	Gang Qiao, Peking Univ.	Zoom, https://tu-dresden.zoom.us/j/89265210633?pwd=Mm82TWdRQm-FoeUdSVXFYKy84QmZmZz09#success "Mode Manipulation in Multimode Fibres for Imaging and Communication Systems."
28 Oct, Tuesday, 15:00	44	Boxiao Wang	Zoom, Seminar talk, job interview, holographic AI-supported computational imaging during laser material processing, title (tbd), Zoom Meeting (Passcode: Laser1#) -withdrawn-
29 Oct, Wednesday, 14:00	44	Alexander Thees	Seminar talk on job interview for holographic AI-supported computational imaging during laser material processing, Zoom Meeting (Passcode: Laser1#)
28 Oct.	44	-	<i>No show (FiO Conference, Denver)</i>
04 Nov.	45	Jialong Zhang Zhaoyi Liu	Compressive ultrasonic sensing through open cell metal foam (SA defense, supervision ZD) Online-Oriented Smoothing Iterative Learning Control for FMCW LiDAR Nonlinearity Compensation (JD)
05 Nov., 8:00	45	Benjamin Rudolf, Jena	Multimode fiber endoscopy for biomedicine (tbd) New link: https://tu-dresden.zoom.us/j/89265210633?pwd=Mm82TWdRQm-FoeUdSVXFYKy84QmZmZz09#success Former link: https://tu-dresden.zoom.us/j/66352375721?pwd=uY9A9Vi59FbnXKozbRsVYos9kTK8vu.1
11 Nov.	46	Dr. Anna Taubenberger BIOTEC	S1 Biosafety Briefing (only for MST members)

(LB)			
18 Nov. (JD)	47	Dr. Lars Büttner	Laser Safety & Hazardous Substances Briefing (only for MST members)
20 Nov., 10:00, BAR17	47	Konrad Ließ	Physics model of multimode waveguide-based ultra- sound imaging of hot melts (DA defense, supervision CO)
25 Nov.	48	Zichen Tian William Naundorf	Ultrasonic Scholte wave based bubble monitoring in water electrolyzer (SA defense, supervision ZD) Characterization of a modal and a zonal adaptive-opti- cal correction for aberrations arising from strongly curved phase boundaries (SA defense, supervision CB)
02 Dec.	49	Zhenyu Huang	Point Spread Function engineering in optogenetics (intermediate report, supervision FS)
09 Dec.	50	Yaokuan Zhang	Experimental investigation of single channel US imag- ing (intermediate report, supervision ZD)
16 Dec.	51	Wuming Zheng	Force Prediction in optical trapping using Neural Net- works (Diploma defense, supervision DK)
	52	– no show –	Christmas vacation
	1	– no show –	Christmas vacation
06 Jan.	2	Svea Steuer	Optical Coherence Tomography towards biomedicine
13 Jan., 14:00	3	Houchun Tao	Optical Computing for Channel Recovery in Multi- mode Fiber Networks (Diploma defense, supervision DP) ZOOM, Zoom Meeting (Passcode: Laser1#)
20 Jan.	4	– no show –	–
27 Jan.	5	– no show –	–
03 Feb.	6	William Naundorf, Ma- this Thomas Müller, Elias Ullmann Florian Kaulfuß, Niklas Weise Jiahao Liang	OPMT FastHolo (FS) OPMT BrainAce (JD) OPMT DiffScope (TG)
10 Feb	7	Florian Kaulfuß, Niklas Weise Daniel Hermann, Jan Frederick	OS RoCoNet (RW) OPMT QuDIT (SK)
17 Feb.	8	Nacef Chaouch	Numerical investigation of the full-waveform inver- sion imaging of the human brain (SA intermediate re- port, Supervision CO)
24 Feb.	9	Qingyuan Zeng	Enhancing multimode waveguide-based ultrasound imaging in liquids using waveguide geometry (SA in- termediate report, Supervision CO)
20 March		Prof Yuki Otani	Quantitative discrimination of biological tissues by mi- cro-elastographic measurement towards birefrin- gence studies, tbd