

**Seminar on Computational Measurement Systems and  
Biomedical Computational Laser Systems (BIOLAS),  
SoSe 2022 (12.04-24.07), GÖR/0229**

**Date:** Monday, 3. DS., 11:10 – 12:40, GÖR/0229

Date	KW	Lecturer	Topic
04 April LB	14	Katharina Schmidt	Introduction to Seminar & Presentation of Topics for Students
11 April NK	15	Robert Kuschmierz	Introduction to Seminar & Presentation of Topics for Students
18 April	16	– no seminar –	Ostermontag
25 April JC	17	Bin Yang (SA JS) Benedikt Krug	Optimization of Three-dimensional Optical Projection Tomographic Reconstruction via Computer Vision and Deep Learning – <i>Defense of Studienarbeit</i> Advances in Stimulated Brillouin Microscopy
02 May RK	18	Dr. Lars Büttner	Lasersicherheitsunterweisung & Gefahrstoffbelehrung (only for MST)
06 May, 9:00, BAR205	18	Hannes Emmerich	Test Presentation for Conference Sensor, Nürnberg
06 May, 10:00 ZOOM	18	Laura Nieber (DA HE)	Untersuchung von Wellenleiter-basierten Luftultraschallarrays zur Erfassung von Schaumparametern in Flotationsprozessen– <i>Defense of Diploma Work</i>
09 May	19	Ya Gao (DA FS)	Evaluating Biological Neural Networks with Artificial Neural Networks – <i>Defense of Diploma Work</i>
16 May, 11:10 BAR205	20	Jonas Hitziger (DA FB) Ning Gou (DA KS)	Tracking of Cardiomyocytes using a Double-Helix Point-Spread Function – <i>Defense of Diploma Work</i> Reinforcement Learning based aberration correction – <i>Defense of Diploma Work</i>
20 May, Friday, 13:00 BAR 106	20	Benedikt Geiger (SA, LG)	Plane-Wave-Compounding mit akustischen Multimode-Wellenleitern und der digitalen Zeitumkehrtechnik – <i>Defense of Diploma Work</i>
23 May	21	-no show	-no show
30 May	22	Nam Van Tran (DA TG) <b>Dr Claus Roll</b> <b>Director Optica Europe</b>	Investigation of neural networks for 3D image reconstruction from speckle patterns of a minimally invasive endoscope with diffuser – <i>Defense of Diploma Work</i> <i>Presentation about Optica-Advancing Optics and Photonics Worldwide (15 min)</i>
02 June, Thursday, 15.00, BAR205	22	Katharina Schmidt, Jakob Dremel, Sebastian Schwabe, Dennis Pohle	Test Presentations for Conference DGaO, Pforzheim
06 June	23	– no seminar –	Pfingstmontag
13 June	24	<b>Ilenia Meloni</b> <b>Kurt-Schwabe-Institut für Mess- und Sensortechnik Meinsberg e.V.</b>	<b>Adaptive light sources for optogenetic stimulation of Drosophila melanogaster</b>
20 June	25	David Krause (DA SR)	Measurement of the Optical Transmission Matrix of long Multimode-Fibers – <i>Defense of Diploma Work</i>
27 June 11:10	26	<b>Prof. Michael Kues</b> <b>Institute of Photonics, Leibniz University Hanover</b>	<b>Integrated quantum frequency combs for complex photon state creation and processing</b>
27 June 15:00	26	<b>Yoshio Hayasaki</b> <b>Center for Optical Research and Education (CORE), Utsunomiya University</b>	<b>In-system optimization of a hologram for shaped-beam laser processing</b>
29 June 11:10 BAR205	26	<b>Dr. Joel Carpenter</b> <b>University of Queensland</b>	<b>Arbitrary vector spatiotemporal beamshaping: Any amplitude, phase and polarization at any delay</b>
4 July, 11:10, BAR205	27	<b>Clemens Bilsing</b>	<b>Particle Tracking Velocimetry With Dynamic Aberration Correction For 3D Flow Measurements Through Fluctuating Phase Boundaries (20 min Presentation, for Lisbon)</b>

External lecturers are shown in bold, in green are checks and in red are changes. Attention: The seminar plan can be subject to short-term changes, see Internet. The slides should be written in English. The lectures can be presented either in German or English (save the slides in the intranet). Organization: Dr. L. Büttner, BAR 28, Tel. 463-35314