

# Seminar on Computational Laser Systems (Measurement Systems Seminar/BIOLAS), SS 2026

**Date: Monday, 3. DS., 11:10 – 12:40, BAR I88** (regular seminar, extra dates are in red)

Date	CW	Lecturer	Topic
13.04.	16	Jakob Dremel Dr. Lars Büttner	Introduction to Seminar & Presentation of Topics for Students
20.04.	17	<b>Elena Goi</b>	Optical computing, tbd
<b>22.04</b> <b>9:20</b>		<b>t.b.a</b>	Biomedical Sensors & Actuators
27.04.	18	Qingyuan Zeng  Nacef Chaouch	Ultrasound multimode waveguide with slanted geometry ( <i>SA defense, CO</i> ) Simulation of ultrasound propagation in the human brain ( <i>SA defense, CO</i> )
04.05.	19	Mathis Mueller	Optical Coherence Tomography measurements of erosion during sputtering ( <i>SA defense, JD</i> )
<b>06.05.</b> <b>9:20</b>		<b>t.b.a</b>	Biomedical Sensors & Actuators
11.05.	20	Yaokuan Zhang	Experimental investigation of single-channel ultrasound imaging ( <i>DA defense, ZD</i> )
<b>13.05.</b> <b>9:20</b>		<b>t.b.a</b>	Biomedical Sensors & Actuators
18.05.	21	Chuan Shi  Shiyue Chen	Computational 3D Endoscopy with Microlens Arrays ( <i>DA intermediate report, TG</i> ) Multidimensional demultiplexer of multimode fiber using optical diffractive neural networks ( <i>DA intermediate report, QZ</i> )
20.05. 9:20		<b>t.b.a</b>	Biomedical Sensors & Actuators
<b>25.05.</b>	<b>22</b>	<b>- no seminar -</b>	<b>Pfingsten / Pentecost</b>
01.06.	23	Dr. Lars Büttner	Laser Safety & Hazardous Substances Briefing (only for MST members)
08.06.	24	-	<b>(JC: Taiwan/Japan travel)</b>
15.06.	25	-	<b>(JC: Taiwan/Japan travel)</b>
22.06.	26	Yared Zhena Qilin Pan	Quantum Technology – Measurements with qdots (tdb) Reconstruction algorithms for optical tomography ( <i>SA defense, BY</i> )
29.06.	27	t.b.a	student defense
06.07.	28	t.b.a	student defenses

13.07.	29	-	(JC: travel)
20.07.	30	-	(JC: travel)

\*ZOOM room:

<https://tu-dresden.zoom.us/j/89265210633?pwd=Mm82TWdRQmFoeUdSVXFYKy84QmZmZz09#success>

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

Structure of the talks: 1) Scientific Question; 2) State of the art / literature survey; 3) Problem / Hurdles; 4) Hypotheses / Methods / Advantages and Disadvantages; 5) Transfer to real-world applications / Requirement for implementation in applications; 6) Vision