SLT 2024
04 June – 06 June

University of Stuttgart
Germany

SLT 2024 – STUTTGART LASER TECHNOLOGY FORUM

CALL FOR **PAPERS**

1 Submission of a 1-page abstract
until **15 December 2023**

2 Notification of acceptance
on **31 January 2024**

3 Registration of presenting authors
until **30 April 2024**

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CONFERENCE SCOPE AND TOPICS

↘ **Lasers and Optics**
High-Power Lasers (from CW to Ultrafast)
Non-Linear Optics for Pulse Compression and Frequency Conversion
Machine Learning in Optics and Lasers
Diffractive Optics for Spatial, Spectral, and Temporal Beam Shaping
Novel Laser Concepts
Fibre-Optic Beam Delivery

↘ **Fundamentals of Laser Processing**
Diagnostics of Laser Materials Processing
X-Ray Imaging of Laser Materials Processing
Spatial and Temporal Optimization of Processing with Ultrafast Lasers
High-Power Materials Processing (>20 kW CW; >1 kW Ultrafast)
Laser Materials Processing of Advanced Novel Materials
Laser Materials Processing of Semiconductors and Dielectrics

↘ **Lasers in Manufacturing**
Machine Learning in Manufacturing
Process Monitoring and Control in Laser Materials Processing
Novel Laser Processes from Ultrafast to CW and Combinations thereof
Scaling the Productivity of Laser Materials Processing
Scaling of Additive Manufacturing (Resolution, Productivity)
Digital Methods in Laser-Based Manufacturing
New Machines, Strategies, and Methods

↘ **Special Topics**
Laser Processing for Quantum Technologies
Versatile High-Power Lasers from CW to Ultrafast
Dynamic Laser Beam Shaping and its Application

Online Submission
www.conftool.org/slt2024

For more information please visit
www.slt.uni-stuttgart.de

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