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Type: **Oral Presentation**

Laser Technology

Monday, 7 April 2025 09:30 (1 hour)

The talk will provide an overview of high power lasers and short pulse ultraintense lasers, also discussing key properties of amplifying lasing media for short-pulse amplification.

An overview of ultraintense laser systems will be given, discussing main issues, from amplification to plasma, including focal spot quality, temporal contrast etc. Scaling of laser technology to drive future large accelerator systems will be discussed, highlighting potential and limits of existing Ti:Sa technology and reviewing other approaches for high rep-rate and high wall-plug efficiency. An overview of ongoing research projects related to laser development for EuPRAXIA and other user infrastructures will also be given.

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