



# Das Institut für Optische Technologien lädt ein zum Kolloquiumsvortrag

## Modelocked thin-disk lasers: a tool for compact high-power ultrafast sources ranging from the XUV to the THz

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The amazing progress made by high-power ultrafast laser systems in the last decade has revolutionized many fields of science and technology. Among laser technologies that support this progress, disk lasers have made particularly fast progress: their geometry is especially well-suited for ultrafast power and energy scaling. One particularly promising approach are modelocked thin-disk oscillators, which can nowadays achieve hundreds of watts of average power from a simple, one-box, multi-MHz repetition rate oscillator. So far, record-holding systems reach 275W of average power, and 80  $\mu$ J pulse energy, both with Yb:YAG thin-disk lasers. Much higher levels are foreseen in the very near future.

We will review latest progress achieved with this technology, next steps and challenges towards further scaling and promising applications of these high-repetition rate systems.

Einladender: Prof. Dr. Ulrich Wittrock

[www.fh-muenster.de/iot](http://www.fh-muenster.de/iot)

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Stegerwaldstraße 39  
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Datum:

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Uhrzeit:

**17.00 Uhr c.t.**

