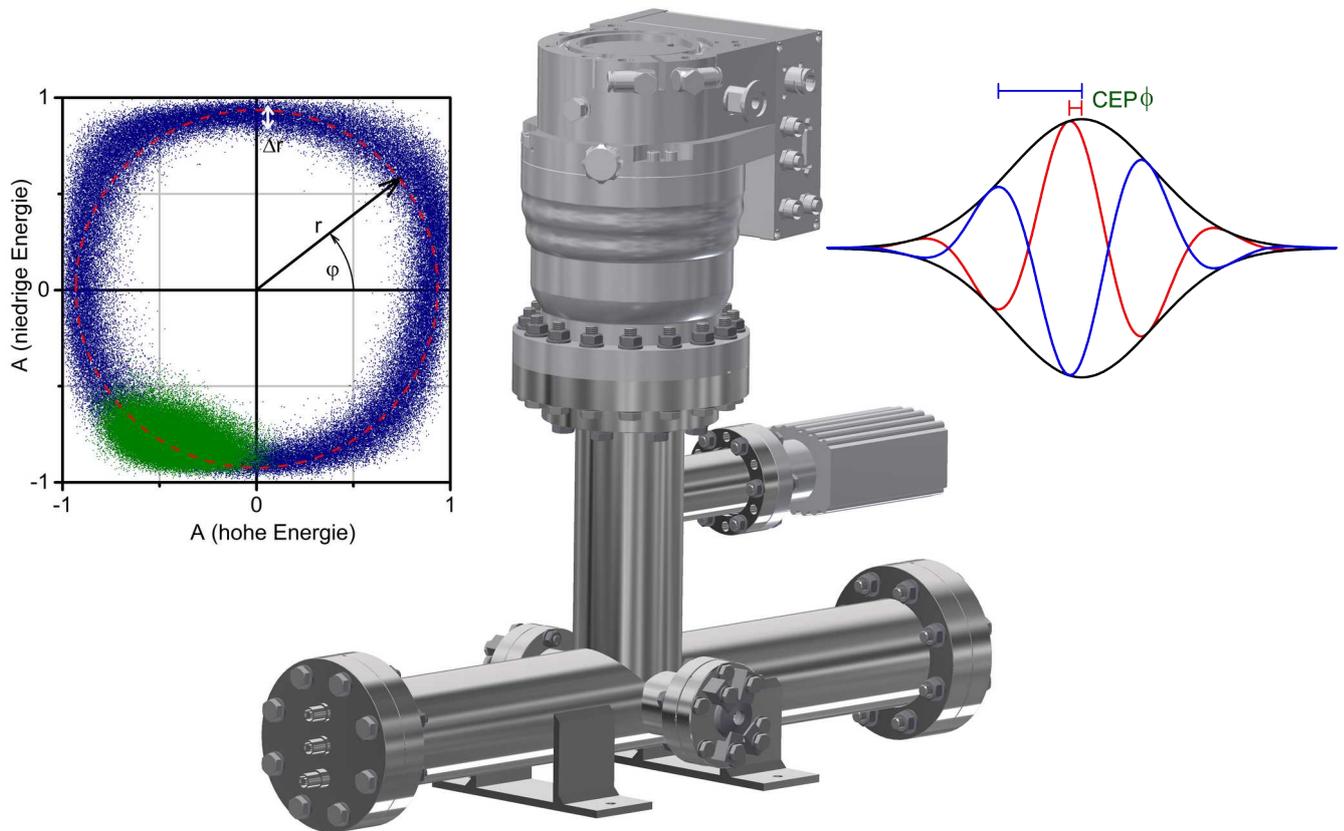


# Stereo-ATI Few-Cycle Pulse Meter

## Data sheet



### Capabilities:

- access to Carrier-Envelope Phase (CEP) and laser pulse asymmetry (i.e. duration)
- simultaneously, continuously, for every single shot in real time
- @ several 100 kHz repetition rate
- typical precision  $\sim 80$  mrad SD, and up to 20 mrad SD, depending on Laser
- allows for phase tagging and CEP-stabilization
- efficient Laser tuning and diagnostics tool

### Range of operation:

- Pulse duration 1 – 3 optical cycles, e.g. about 2.6 – 8 fs @ 800 nm, extendable to 4 – 6 cycles
- Required pulse energy 10 – 100  $\mu$ J and linear, (horizontal) polarization
- Wavelength 400 – 2,000 nm

Footprint: 60 cm x 60 cm

### References:

Wittmann et al. *Nature Physics* **5** (2009) DOI:10.1038/nphys1250  
Sayler et al. *Optics Letters* **36** (2011) DOI:10.1364/OL.36.000001  
Sayler et al. *Optics Express* **19** (2011) DOI:10.1364/OE.19.004464  
Hoff et al. *Optics Letters* **43** (2018) DOI:10.1364/OL.43.003850

single cycle instruments UG (haftungsbeschränkt) & Co. KG,  
Hans-Knöll-Straße 6,  
07745 Jena, Germany  
info@sci-phi.de