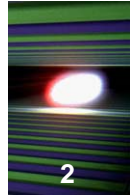


Work Group I

Measurement of spatial profiles,
wavefront, and coherence

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- **Parameters**
 - Source size, position and stability
 - Focus (characterized in commissioning)
 - Transverse coherence length and degree of coherence Number of modes
- **Requirements** on these parameters
 - Beam diagnostic separate from experiment
 - fast and easy: insertable
- **Devices**
 - Wavefront sensor: resolution $\lambda/20$
 - Today $\lambda/10$
 - Interferometer: Hartmann, Grating or Bilens?
 - Ablation measurements
 - Fluorescent materials – saturation, dynamic range, damage
 - Fiber/wire measurements
 - Lens for source imaging
 - AFM/SEM necessary
- **Commissioning Strategies**
 - High Z materials for imprints for focussing optics characterization
 - Pay attention to Submicron beams!