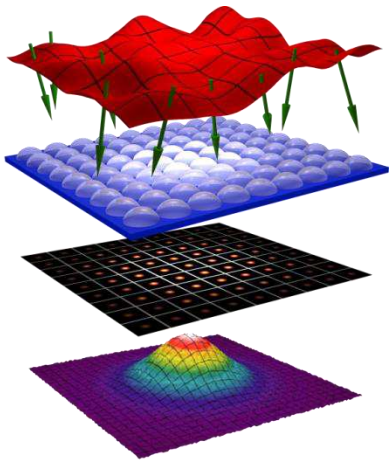
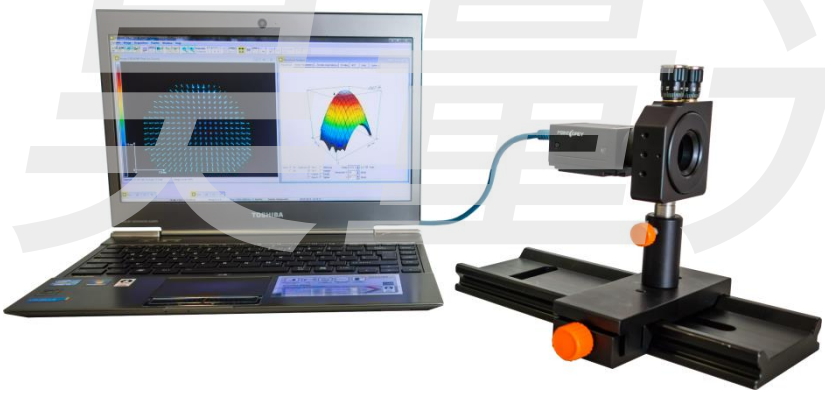
Hartmann-Shack Wavefront Sensor

Operation principle

The **Hartmann-Shack** wavefront sensor of LLG was designed for comprehensive laser beam and optics characterization. The system uses a micro-lens array for dividing the incoming wave into a large number of sub-rays (cf. figure right). Intensity and position of the individual foci are monitored with a camera, enabling the reconstruction of both **beam profile** and **wavefront** from a single measurement.

These data accomplish real-time evaluation of beam propagation parameters (beam width, divergence, M^2) which is especially important for pulsed or fluctuating sources.

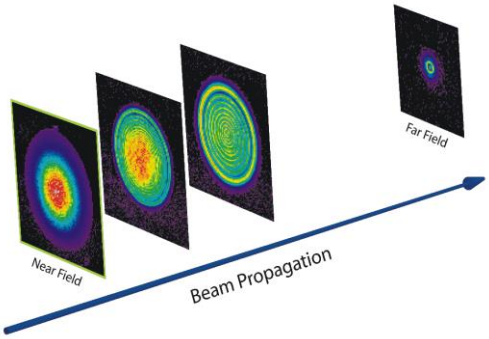




- Beam characterization
- Optics testing (NIR ... EUV)
- Adaptive optics
- ISO beam parameters
- M^2 in real-time
- Zernike analysis
- Beam propagation

Features

- All parameters from single measurement
- Wide spectral range: 1064 - 1 nm
- Dynamic range: up to 100 λ (@633 nm)
- Sensitivity (optics testing): < 100 pm
- Various micro-lenses and sensor (10 bit - 14 bit)
- USB 3.0 camera (ideal for laptop)
- Customized solutions



上海昊量光电设备有限公司 Phone: 4006-888-532 WeChat: Auniontech Website: www.auniontech.com E-mail: info@auniontech.com