Dynamic Interferometry Workshop

Accurate 3D Measurements in Any Environment

Join 4D Technology and our partner OptiPro Systems to learn about Dynamic Interferometry, automation solutions, and experience the latest in optical metrology. This workshop, hosted at the OptiPro Systems Facility on July 15, will cover topics such as:

Theory and Practical Aspects of Dynamic Interferometry
for 3D Shape, Transmitted Wavefront Measurements, and Optical System Alignment

- What it is, how it works
- Unique capabilities using dynamic interferometry
- When to use a Fizeau versus Twyman-Green interferometer
- What is ITF and why does it matter in detecting mid-spatial frequencies and other manufacturing artifacts

Applications of Dynamic Interferometry

- Ground and space-based telescopes
- Optics shop measurements
- Improved interferometric configurations for superior testing of IR components and systems
- Short-coherence dynamic interferometry to enable measurement of thin and plane-parallel optics
- Supersmooth measurements
- Radius of curvature measurements
- Portable surface roughness measurements
- 3D optical inspection system for defect, chamfer and edge break analysis

Automating Metrology & Inspection

- OptiPro capabilities/products
- Automation in inspection and production
- Identifying Automation Opportunities

Hands-On Experience with Dynamic Interferometers

- PhaseCam: Our highest performance Twyman-green interferometer, with patented, vibration-insensitive measurement capability for concave and long cavity measurements.
- AccuFiz Duo: New! Two laser sources which enables both short coherence on axis dynamic and long coherence phase shifting interferometry for measuring thin, transparent optics or digital hologram measurements all in one system.
- NanoCam: A small, non-contact optical profiler for vibration-immune roughness measurement that can be handheld or mounted on a robot.
- InSpec: A handheld, precision instrument for non-contact surface feature and defect measurement with um-level resolution.
- InSpec SR: A handheld 3D surface roughness system with nm-level resolution.

And Automated Solutions Demonstrations

- NanoCam AMS: An automated 3D, non-contact optical profiler to easily measure hundreds of locations on supersmooth mirrors.
- InSpec AMS: A fully automated 3D, optical inspection system to measure features such as chamfer, radius, and edge break, and defects such as pits, dings, and scratches.

Plus, we'll be demonstrating the latest functionality of 4Sight Focus, including real-time Zernike alignment, advanced island leveling of mirrors and telescope optics, and geometric transforms; and previewing our next release with new fiducial capabilities, aspheric Zernike functionality and more.

OptiPro Systems
6368 Dean Parkway | Ontario, NY 14519
Time: 9:00 AM – 4:00 PM EST | Tuesday, July 15 | Lunch provided
Cost: Free but registration is required as seating is limited

Register Here