PHINDEN

PHASEFORM SENSORLESS ADAPTIVE OPTICS SOFTWARE

PHINDEN is Phaseform's turnkey software package for real-time, image-based adaptive optics (AO) in microscopy. It automates aberration correction via the Deformable Phase Plate (DPP), enhancing resolution, SNR, and contrast—while running seamlessly in the background with native microscope control software, preserving your existing workflow.

KEY FEATURES

Automates sensorless aberration measurement & correction
Brings the power of image-based adaptive optics to your fingertips—just a few mouse clicks to optimize image quality in real time.
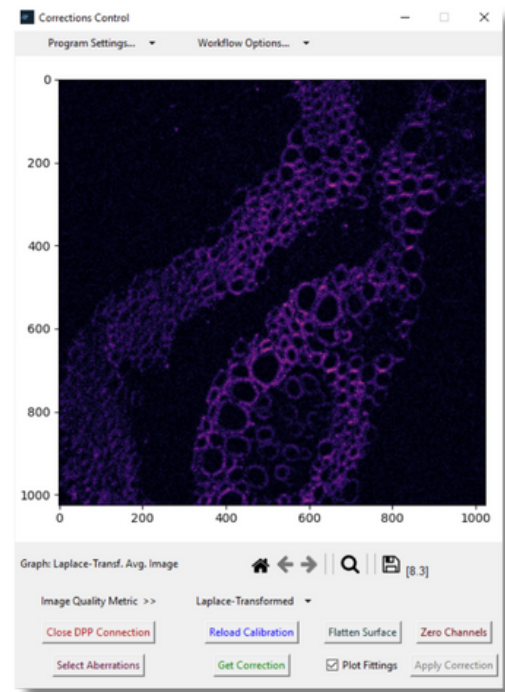
Enables plug-and-play adaptive optics
Provides a streamlined path to full AO integration, combining Phaseform's DPP with minimal hardware and software setup, with minimal disruption to your workflow.

Seamlessly integrates with native control software
Runs in the background alongside platforms like µManager & ScanImage, allowing users to operate their microscopes as usual.

Adapts to diverse modalities and specimen types
Compatible with a wide range of microscopy techniques and biological samples, using a broad selection of implemented image quality metrics to guide optimal correction.
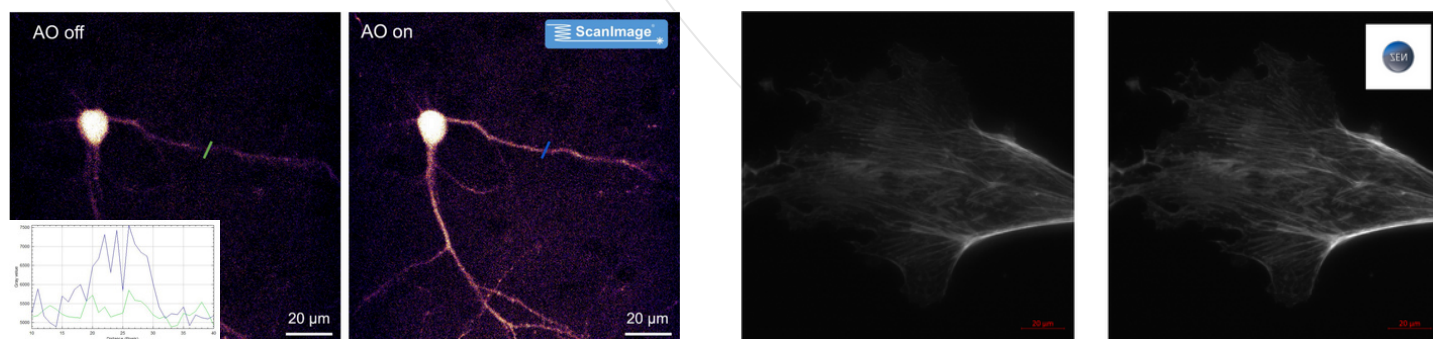
CASE STUDIES

Zen-blue Integration:
- Zeiss Axiovert 200 with PCO CMOS camera (Life Imaging Center, University of Freiburg. Courtesy of Dr. Roland Nitschke)

µManager Integration:
- Light Sheet microscope (Center for Brain Research, Medical University of Vienna, Vienna. Courtesy of the Group of Prof. Hans Ulrich Dodt)

ScanImage Integration: -
- Custom-built two-photon microscope (DZNE Bonn, Light Microscopy Facility. Courtesy of the Group of Dr. Hans-Ulrich Fried)

Zeiss ZenBlue Integration
- Requires verification of compatibility using a special script or during a remote session.

Other Integrations
- Contact us to explore possibilities for integrating PHINDEN with your specific system. We're here to help make it happen!

SYSTEM REQUIREMENTS

µManager Integration
- Version: µManager 2.0

ScanImage Integration
- Python: Minimum version 3.8
- MATLAB: Minimum version R2020b.
- ScanImage: version >= 2019aR0
- WINDOWS: Supported on Windows 7 SP1, 8.1, 10, 11.

CONTACT US

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