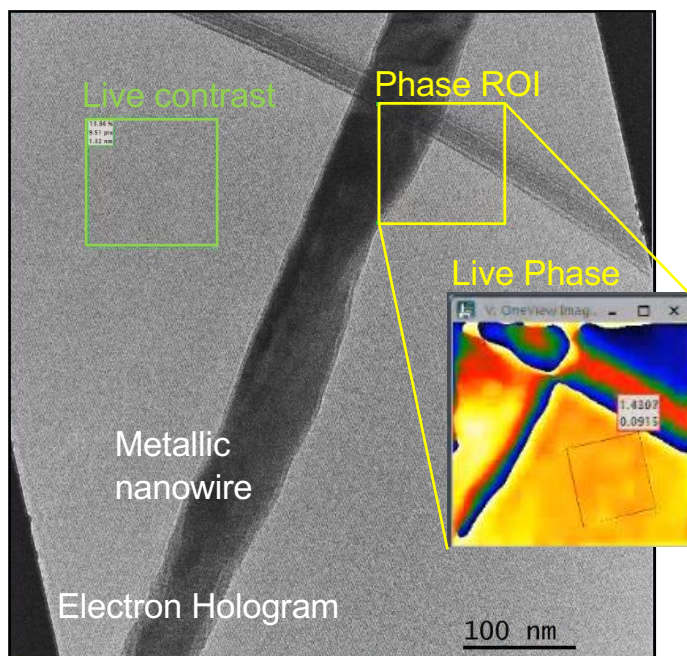


# HoloLive!

DigitalMicrograph Plug-in

# HoloLive! – Realtime off-axis holography

*Live phase imaging during off-axis holography experiments*



HoloLive! reconstructs and displays the phase from electron holograms in real time at the microscope during experiments [1].

Seeing the phase live facilitates any holography session and is essential for in-situ and operando work [2,3].

## Key Features

- ◆ Real-time phase display, including full-frame 4k by 4k reconstructions several times per second
- ◆ Automatic detection and tracking of side-band
- ◆ Live correction using a reference hologram
- ◆ Live phase unwrapping
- ◆ Handy window for controlling procedures and output

## References:

- [1] C. Gatel, J. Dupuy, F. Houdellier, M.J. Hytch, Appl. Phys. Lett. 113, 133102 (2018). Unlimited acquisition time in electron holography by automated feedback control of transmission electron microscope. doi:10.1063/1.5050906
- [2] C. Gatel, B. Warot-Fonrose, N. Bizière, L. A. Rodriguez, D. Reyes, R. Cours, M. Castiella, M.-J. Casanove, Nature Comm. 8, 15703 (2017). Inhomogeneous spatial distribution of the magnetic transition in an iron-rhodium thin film. doi:10.1038/ncomms15703
- [3] J. F. Einsle, C. Gatel, A. Masseboeuf, R. Cours, M. A. Bashir, M. Gubbins, R. M. Bowman, and E. Snoeck, Nano Research 8, 1241 (2015). In situ electron holography of the dynamic magnetic field emanating from a hard-disk drive writer. doi:10.1007/s12274-014-0610-0.

