



Contribution ID: 169

Type: **Talk (preferred)**

## Real-time phase imaging via nanophotonic devices

*Tuesday, 13 December 2022 15:15 (15 minutes)*

Nanophotonic devices enable image processing with potential for biological live-cell imaging and wavefront sensing. Here we demonstrate the use of metasurfaces and thin-films for all-optical visualisation of phase modulations in an optical field and their application to biological imaging.

**Primary author:** Dr WESEMANN, Lukas (University of Melbourne, ARC Centre of Excellence for Transformative Meta-Optical Systems)

**Co-authors:** Mr RICKETT, Jon (University of Melbourne, ARC Centre of Excellence for Transformative Meta-Optical Systems); Dr SONG, Jingchao (University of Melbourne); Dr LOU, Jieqiong (University of Melbourne); Prof. HINDE, Elizabeth (University of Melbourne); Prof. DAVIS, Timothy J. (University of Melbourne, ARC Centre of Excellence for Transformative Meta-Optical Systems); Prof. ROBERTS, Ann (University of Melbourne, ARC Centre of Excellence for Transformative Meta-Optical Systems)

**Presenter:** Dr WESEMANN, Lukas (University of Melbourne, ARC Centre of Excellence for Transformative Meta-Optical Systems)

**Session Classification:** Focus Session

**Track Classification:** Focused Sessions: Metaphotonics and Metasurfaces