

Holo-Workshop 2018 in Zeuthen

I. DPC vs Off-axis vs Inline vs TIE

1. DPC

Helmut Kohl

2. Off-axis EH

*David Cooper: "Electrostatic polarization fields in heterostructures: DPC vs EH
(specimen preparation, local charging, local currents, local heating)"*

3. Inline EH

4. TIE

5. Ptychography

Jonas Krehl: "Inelastic DPC / Ptychography to Measure Fields in Surface Plasmons"

II. Insitu & Applications

1. Insitu systems

Dominic Vogt (LOT)

Christophe Gatel: "In-situ EH"

2. Biasing

Martien den Hertog: "In situ Biasing and Off-axis EH of a ZnO Nanowire"

Tsukasa Hirayama: "Precise Measurement of Electric Potential, Field, and Charge Density Profiles across a biased GaAs p-n Junction by In-situ EH"

Tolga Wagner: "Special Preparation for a Constant Reference Wave"

3. Preparation

Udo Hömpler

4. Application: Magnetic Fields

5. Application: Electrostatic Fields

David Cooper: "(Holography on IIIV materials) - Combined with High Signal to Noise and Spatial Resolution Holography"

Michael Narodovitch

Elisabetta Maria Fiordaliso ??

(Tolga Wagner: "3-D Electrostatic Potential")

- 6. Time-resolved electron holography (Sheppard: Tolga Wagner)
Tolga Wagner: "Challenges and Limitations in Time-Resolved EH"
Florent Houdellier: "Ultrafast EH"
- 7. Electron Object Interaction
Anna Elsukova ??
- 8. Cryo EH

III. Instrumentation

- 1. Measurement techniques
Chris Boothroyd: "Phase-shifting holography"
- 2. Phase Plates
Chris Boothroyd: "Understanding Images from Phase Plates"
- 3. Vortex beams
Duchamp Martial: "Manipulation of the phase of the electron wave using MEMS devices: electrostatic simulations, fabrications and implementation in the microscope column"
- 4. Holographic setups/optics
Martin Linck
Christophe Gatel: "Active microscope control and automation for EH"
Martin Hÿtch: "Correcting OneView camera distortions in EH"
- 5. Tomography
Daniel Wolf
- 6. High-Voltage EH
Toshiaki Tanigaki: "High-Voltage EH"
- 7. Low-Voltage EH

IV. Theory

- 1. Simulations
Kurt Scheerschmidt
- 2. Surface

V. Politics

VI. Future