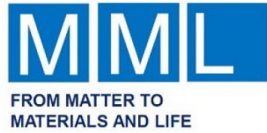


5th Science Workshop of the Program MML



Report of Contributions

Contribution ID: 1

Type: **not specified**

DESY Photon Science

Monday, October 20, 2025 2:20 PM (30 minutes)

Presenter: REDLICH, Britta

Session Classification: Plenary 1

Contribution ID: 2

Type: **not specified**

Welcome & Introduction

Monday, October 20, 2025 2:00 PM (20 minutes)

Presenters: KÜPPER, Jochen; STÖHLKER, Thomas

Session Classification: Welcome and Introduction

Contribution ID: 3

Type: **not specified**

rRIXS maps at X-SPEC

Monday, October 20, 2025 2:50 PM (30 minutes)

Presenter: WEINHARDT, Lothar (Karlsruhe Institute of Technology (KIT))

Session Classification: Plenary 1

Contribution ID: 4

Type: **not specified**

NN

Monday, October 20, 2025 3:20 PM (30 minutes)

Presenter: DURANTE, Marco

Session Classification: Plenary 1

Contribution ID: 5

Type: **not specified**

Inertial fusion research with HED-HIBEF at EuXFEL

Monday, October 20, 2025 4:20 PM (30 minutes)

Presenter: COWAN, Tom

Session Classification: Plenary 2

Contribution ID: 6

Type: **not specified**

NFS and CTR measurements for cation diffusion on Fe₃O₄ surfaces

Monday, October 20, 2025 4:50 PM (30 minutes)

Presenter: TOBER, Steffen

Session Classification: Plenary 2

Contribution ID: 7

Type: **not specified**

NN

Monday, October 20, 2025 5:20 PM (30 minutes)

Presenter: GINN, Helen

Session Classification: Plenary 2

Contribution ID: 8

Type: **not specified**

Science Slam 1

Monday, October 20, 2025 5:50 PM (30 minutes)

Presenter: SELECTED POSTER PRESENTERS

Session Classification: Science Slam 1

Contribution ID: 9

Type: **not specified**

Poster Session 1

Monday, October 20, 2025 6:20 PM (1h 30m)

Session Classification: Poster Session 1

Contribution ID: **10**

Type: **not specified**

Resonant excitation of the nuclear clock isomer ^{45}Sc Or

Tuesday, October 21, 2025 9:00 AM (30 minutes)

Presenter: RÖHLSBERGER, Ralf

Session Classification: Plenary 3

Contribution ID: 11

Type: **not specified**

Focussed Ions for Materials Design

Tuesday, October 21, 2025 9:30 AM (30 minutes)

Presenter: KLINGER, Nico

Session Classification: Plenary 3

Contribution ID: **12**

Type: **not specified**

NN

Tuesday, October 21, 2025 10:00 AM (30 minutes)

Presenter: WEBER, Gert

Session Classification: Plenary 3

Contribution ID: **13**

Type: **not specified**

Science Slam 2

Tuesday, October 21, 2025 5:15 PM (30 minutes)

Presenter: SELECTED POSTER PRESENTERS

Session Classification: Science Slam 2

Contribution ID: **14**

Type: **not specified**

Poster Session 2

Tuesday, October 21, 2025 5:45 PM (1h 30m)

Session Classification: Poster Session 2

Contribution ID: 15

Type: **not specified**

Laser-plasma interactions with broadband laser pulses

Wednesday, October 22, 2025 9:00 AM (30 minutes)

Presenter: BAGNOUD, Vincent

Session Classification: Plenary 4

Contribution ID: 16

Type: **not specified**

Nanoscale dark-field imaging in full-field transmission X-ray microscopy

Wednesday, October 22, 2025 9:30 AM (30 minutes)

Presenter: WIRTENSOHN, Sami

Session Classification: Plenary 4

Contribution ID: 17

Type: **not specified**

NN

Wednesday, October 22, 2025 10:00 AM (30 minutes)

Presenter: VAN DE KAMP, Thomas (IPS)

Session Classification: Plenary 4

Contribution ID: **18**

Type: **not specified**

CMWS –Center for Molecular Water Science

Wednesday, October 22, 2025 11:00 AM (30 minutes)

Presenter: SCHNELL, Melanie

Session Classification: Plenary 5

Contribution ID: **19**

Type: **not specified**

AI-assisted data pipelines for neutron experiments

Wednesday, October 22, 2025 11:30 AM (30 minutes)

Presenter: HÄUSLER, Stefan

Session Classification: Plenary 5

Contribution ID: **20**

Type: **not specified**

NN - RT3

Wednesday, October 22, 2025 12:00 PM (30 minutes)

Session Classification: Plenary 5

Contribution ID: 21

Type: **not specified**

Concluding Remarks

Wednesday, October 22, 2025 12:30 PM (30 minutes)

Presenters: KÜPPER, Jochen; STÖHLKER, Thomas

Session Classification: Concluding Remarks

Contribution ID: 22

Type: **not specified**

Imaging collective quantum fluctuations of the structure of a complex molecule

Tuesday, October 21, 2025 11:00 AM (15 minutes)

Presenter: RICHARD, Benoît

Session Classification: Parallel: Matter (RT1)

Contribution ID: 23

Type: **not specified**

Chiral Molecules

Tuesday, October 21, 2025 11:15 AM (15 minutes)

Presenter: WANNIE, Vincent

Session Classification: Parallel: Matter (RT1)

Contribution ID: 24

Type: **not specified**

Phase transition kinetics of superionic H₂O ice phases revealed by MHz XFEL heating experiments.

Tuesday, October 21, 2025 11:45 AM (15 minutes)

Presenter: HUSBAND, Rachel

Session Classification: Parallel: Matter (RT1)

Contribution ID: 25

Type: **not specified**

Visualizing plasmons and ultrafast kinetic instabilities in laser-driven solids using X-ray scattering

Tuesday, October 21, 2025 12:00 PM (15 minutes)

Presenters: ORDYNA, Pawel; KLUGE, Thomas

Session Classification: Parallel: Matter (RT1)

Contribution ID: 26

Type: **not specified**

Strong field physics / Dynamically assisted nuclear fusion / High precision cross section relevant for solar CNO burn cycle

Tuesday, October 21, 2025 12:15 PM (15 minutes)

Presenters: KOHLFÜRST, Christian; BEMMERER, D.; SCHÜTZHOLD, Ralf

Session Classification: Parallel: Matter (RT1)

Contribution ID: 27

Type: **not specified**

CMOS compatible chip-scale sources of squeezed light

Tuesday, October 21, 2025 11:30 AM (15 minutes)

Presenter: ULANOV, Alexander

Session Classification: Parallel: Matter (RT1)

Contribution ID: 28

Type: **not specified**

Nanoscale imaging of biological samples by table-top EUV and Soft X-ray microscopy

Tuesday, October 21, 2025 1:30 PM (15 minutes)

Presenter: KALETA, Sophia

Session Classification: Parallel: Matter (RT1)

Contribution ID: 29

Type: **not specified**

High-purity polarimetry for high photon energies

Tuesday, October 21, 2025 1:45 PM (15 minutes)

Presenter: MARX-GLOWNA, Berit

Session Classification: Parallel: Matter (RT1)

Contribution ID: **30**

Type: **not specified**

High-temperature ^{205}Tl decay clarifies ^{205}Pb dating in early Solar System

Tuesday, October 21, 2025 2:00 PM (15 minutes)

Presenter: GLORIUS, Jan

Session Classification: Parallel: Matter (RT1)

Contribution ID: 31

Type: **not specified**

High-resolution absorption spectroscopy of heavy-ion-heated matter

Tuesday, October 21, 2025 2:15 PM (15 minutes)

Presenter: MAJOR, Zsuzsanna

Session Classification: Parallel: Matter (RT1)

Contribution ID: 32

Type: **not specified**

Resonant soft X-ray photoelectron spectroscopy studies of metal-oxide nanoparticles in aqueous solution

Tuesday, October 21, 2025 2:30 PM (15 minutes)

Presenter: SEIDEL, Robert

Session Classification: Parallel: Matter (RT1)

Contribution ID: 33

Type: **not specified**

A 52 W few-cycle, optical parametric chirped-pulse amplifier for soft X-ray generation

Tuesday, October 21, 2025 2:45 PM (15 minutes)

Presenter: WALKE, Daniel

Session Classification: Parallel: Matter (RT1)

Contribution ID: **34**

Type: **not specified**

1

Session Classification: Parallel: Matter (RT1)

Contribution ID: 35

Type: **not specified**

Dynamic control of X-ray core-exciton resonances by Coulomb screening in photoexcited semiconductors

Tuesday, October 21, 2025 11:00 AM (15 minutes)

Presenter: ROSSI, Thomas

Session Classification: Parallel: Materials (RT2)

Contribution ID: 36

Type: **not specified**

Orbital-overlap-driven hybridization in 3d-transition metal perovskite oxides LaMO_3 (M = Ti-Ni) and La_2CuO_4

Tuesday, October 21, 2025 11:15 AM (15 minutes)

Presenter: SIEWIERSKA, Katarzyna

Session Classification: Parallel: Materials (RT2)

Contribution ID: 37

Type: **not specified**

X-ray spectroscopy of UO₂ and the QUASY project

Tuesday, October 21, 2025 11:30 AM (15 minutes)

Presenter: BLANKENSHIP, Mary (KIT)

Session Classification: Parallel: Materials (RT2)

Contribution ID: 38

Type: **not specified**

Pulsed Laser Deposition of multiferroic structures

Tuesday, October 21, 2025 11:45 AM (15 minutes)

Presenters: NERGIS, Berkin; BAUER, Soudes

Session Classification: Parallel: Materials (RT2)

Contribution ID: **39**

Type: **not specified**

NN - DESY 1

Tuesday, October 21, 2025 12:00 PM (15 minutes)

Presenter: BACHMANN, Lydia

Session Classification: Parallel: Materials (RT2)

Contribution ID: 40

Type: **not specified**

NN - DESY 2

Tuesday, October 21, 2025 12:15 PM (15 minutes)

Presenter: KELLER, Thomas

Session Classification: Parallel: Materials (RT2)

Contribution ID: 41

Type: **not specified**

Multilength scale investigation of the Perovskite-Bownmillerite topotactic phase transition in LaSrMnO₃ thin films

Tuesday, October 21, 2025 1:30 PM (15 minutes)

Presenter: YIN, Chenyang

Session Classification: Parallel: Materials (RT2)

Contribution ID: 42

Type: **not specified**

QENS Study of the Interface Dynamics of Wet Iron Oxide Nanoparticles

Tuesday, October 21, 2025 1:45 PM (15 minutes)

Presenter: PASCARIU, Matei

Session Classification: Parallel: Materials (RT2)

Contribution ID: 43

Type: **not specified**

Microstructure mapping with a white synchrotron radiation beam

Tuesday, October 21, 2025 2:00 PM (15 minutes)

Presenter: ABREU FARIA, Guilherme

Session Classification: Parallel: Materials (RT2)

Contribution ID: 44

Type: **not specified**

Swift heavy ion irradiation effects on tailored nanostructures

Tuesday, October 21, 2025 2:15 PM (15 minutes)

Presenter: SCHUBERT, Ina

Session Classification: Parallel: Materials (RT2)

Contribution ID: 45

Type: **not specified**

High-field superconductivity in UTe₂

Tuesday, October 21, 2025 2:30 PM (15 minutes)

Presenter: HELM, Toni

Session Classification: Parallel: Materials (RT2)

Contribution ID: 46

Type: **not specified**

A high-performance all-silicon photodetector enabling telecom-wavelength detection at room temperature

Tuesday, October 21, 2025 2:45 PM (15 minutes)

Presenter: BERENCEN, Yonder

Session Classification: Parallel: Materials (RT2)

Contribution ID: 47

Type: **not specified**

Gas phase SAXS of protein complexes using our MS SPIDOC platform

Tuesday, October 21, 2025 11:00 AM (15 minutes)

Presenter: KIERSPER, Thomas

Session Classification: Parallel: Life (RT3)

Contribution ID: 48

Type: **not specified**

3D brain tissue imaging using Compton microscopy

Tuesday, October 21, 2025 11:15 AM (15 minutes)

Presenter: ZAKHAROVA, Margarita

Session Classification: Parallel: Life (RT3)

Contribution ID: 49

Type: **not specified**

Novel sample delivery for cryo-electron microscopy

Tuesday, October 21, 2025 11:30 AM (15 minutes)

Presenters: JANSON, Kevin; MEMOVICH, Madeline

Session Classification: Parallel: Life (RT3)

Contribution ID: 50

Type: **not specified**

REGAE or HiPhaX drug screening

Tuesday, October 21, 2025 11:45 AM (15 minutes)

Presenter: MEENTS, Alke

Session Classification: Parallel: Life (RT3)

Contribution ID: 51

Type: **not specified**

Photolyase

Tuesday, October 21, 2025 12:00 PM (15 minutes)

Presenters: KLOPPROGGE, Bjarne; LANGE, Esther

Session Classification: Parallel: Life (RT3)

Contribution ID: 52

Type: **not specified**

HZB 1 - tba

Tuesday, October 21, 2025 12:15 PM (15 minutes)

Presenter: LENNARTZ, Frank

Session Classification: Parallel: Life (RT3)

Contribution ID: 53

Type: **not specified**

HZB 2 - tba

Tuesday, October 21, 2025 1:30 PM (15 minutes)

Presenter: BENZ, Laila

Session Classification: Parallel: Life (RT3)

Contribution ID: 54

Type: **not specified**

HZB 3 - tba

Tuesday, October 21, 2025 1:45 PM (15 minutes)

Presenter: DHYR, Michael

Session Classification: Parallel: Life (RT3)

Contribution ID: 55

Type: **not specified**

Eye tumor therapy

Tuesday, October 21, 2025 2:00 PM (15 minutes)

Presenter: HZB

Session Classification: Parallel: Life (RT3)

Contribution ID: 56

Type: **not specified**

Towards Serial Computed Tomography of Small Organisms

Tuesday, October 21, 2025 2:15 PM (15 minutes)

Presenter: FARAGO, Tomas

Session Classification: Parallel: Life (RT3)

Contribution ID: 57

Type: **not specified**

An AI-Supported Large Scale Morphological Study: The Medaka Inbred Kiyosu-Karlsruhe Repository

Tuesday, October 21, 2025 2:30 PM (15 minutes)

Presenter: TAN, Xiaoying

Session Classification: Parallel: Life (RT3)

Contribution ID: 58

Type: **not specified**

Integrating Synchrotron X-ray Imaging and DNA Sequencing of Insects

Tuesday, October 21, 2025 2:45 PM (15 minutes)

Presenter: VASLITA, Cristina

Session Classification: Parallel: Life (RT3)

Contribution ID: 59

Type: **not specified**

Opening words

Tuesday, October 21, 2025 3:30 PM (5 minutes)

Presenter: KÜPPER, Jochen

Session Classification: "Special Session"

Contribution ID: **60**

Type: **not specified**

Laudatio

Tuesday, October 21, 2025 3:35 PM (30 minutes)

Presenter: DOSCH, Helmut

Session Classification: "Special Session"

Contribution ID: **61**

Type: **not specified**

Formal act

Tuesday, October 21, 2025 4:05 PM (10 minutes)

Presenter: KÜPPER, Jochen

Session Classification: "Special Session"

Contribution ID: **62**

Type: **not specified**

Scientific presentation

Tuesday, October 21, 2025 4:15 PM (30 minutes)

Presenter: TBA

Session Classification: "Special Session"

Contribution ID: **63**

Type: **not specified**

MML in MATTER

Tuesday, October 21, 2025 4:45 PM (30 minutes)

Presenter: SCHMIDT, Sebastian

Session Classification: "Special Session"