

IRTG Days

# Int'l Research-Training Group IRTG 2891 "Nuclear Photonics"



TECHNISCHE  
UNIVERSITÄT  
DARMSTADT

August 6, 2024

(S103|100)

## Agenda



August 6, 2024

9:00	Welcome greetings (S103 100)	<b>Prof. Norbert Pietralla</b> Spokesperson IRTG 2891, TU Darmstadt  <b>Dr. Florian Kroll</b> Helmholtz-Zentrum Dresden-Rossendorf
9:30	Radiobiological animal studies with laser-accelerated particle beams	<b>Dr. Florian Kroll</b>
10:00	Atomic Physics for Laser Plasma Accelerators	<b>Brian Edward Marre</b>
10:30	<i>Coffee break</i>	
11:00	Laser electron accelerator as a compact light source for photoactivation experiments	<b>Franziska Marie Herrmann</b>
11:30	Fourier propagators as synthetic diagnostics in PIconGPU	<b>Finn-Ole Carstens</b>
12:00	<i>Lunch break</i>	
13:00	Absolute energy-dependent scintillating screen calibration for real-time detection of laser-accelerated proton bunches and other scintillator based detectors	<b>Joshua Schilz</b>
13:30	Plasma instabilities can be probed with X-ray scattering	<b>Paweł Ordyna</b>

14:00	Influence of Laser Pre-Pulse Ramps on Proton Acceleration from Plastic Targets in 1D and 2D PIC Simulations	<b>Franziska Paschke-Bruehl</b>
14:30	Cryogenic hydrogen jet target platform to study high intensity laser-solid interactions and near-critical density proton acceleration	<b>Stefan Assenbaum</b>
15:00	<i>Coffee break</i>	
15:30	High-brilliance gamma bursts by PW-class laser pulses interacting with a nanoblade	<b>Bogdan Corobean</b>
16:00	Nanostructured targets in high power laser experiments	<b>Ştefania Ionescu</b>
16:30	Gradient based beam line optimization for laser-accelerated ions using surrogate models	<b>Daniel Dewitt</b>
18:30	<i>Dinner</i>	

## August 7, 2024

9:30	S-DALINAC Tour Rendezvous @ S103 100 - 9:15 <b>OR</b> S2 14 - 9:30
10:30	<i>Coffee break</i>
11:00	Conclusion & Farewell
11:30	<i>Lunch break</i>