

Session Program

Sep 23 - 25, 2026

MAT Collaboration Meeting 2026

Session 1: Ion Track Technology

GSI, KBW lecture hall
Planckstr. 1 64291 Darmstadt / Germany

Wed, September 23

2:30 PM

Session 1: Ion Track Technology

Session | **Location:** GSI, KBW lecture hall, Planckstr. 1 64291 Darmstadt / Germany | **Convener:** Siwy, Zuzanna

2:30 – 3:00 PM

Track-Etched Nanopores as Pioneers of Nanofluidics Research on Iontronics, Ionic Neuromorphic Computing and Sensing

Speaker

Siwy, Zuzanna S.

3:00 – 3:20 PM

Nonlinear dynamics and memory effects in nanofluidic memristors, a neuromorphic computing implementation

Speaker

Portillo Pous, Sergio

3:20 – 3:40 PM

Bioinspired Nanofluidics: Engineering Ion Transport through Functional Nanochannels

Speaker

Laucirica, Gregorio

3:40 – 4:00 PM

Insights into scaling of osmotic energy harvesting from single bullet-shaped nanochannels to multiporous membranes

Speaker

Kaya, Dila

4:00 – 4:20 PM

Coffee break

4:20 – 4:40 PM

Ion Track Research at HIRFL: Fundamentals to Interdisciplinary Applications

Speaker

Duan, Jinglai

4:40 – 5:00 PM

Nanostructures by Design: From Size-Dependent Properties to Functional Architectures

Speaker

Wagner, Michael Florian Peter

5:00 – 5:20 PM

Discussion

Speaker

Siwy, Zuzanna

5:20 PM