



# Doctoral Seminar 2024

## Monday 25 November 2024

**Scientific Talks: Talks I (14:00 - 15:30)**

-Conveners: Shelly Mardhia Faizy; Sebastian Klug; Karl Anger; Joshua Schilz; Aliza Salces; Bruno Neumann; Gabriel Gray San Martin

time	[id] title	presenter
14:00	[14] Modifying Pharmacokinetics of Radiocopper Bispidine Complexes: Towards Increased Tumor Uptake of Their Conjugates	ANGER, Karl
14:15	[13] FLASH-radiotherapy research: A potential revolution in cancer treatment	SCHILZ, Joshua
14:30	[25] Lithium recovery from battery recycling process water	SALCES, Aliza
14:45	[23] Transforming martensite in NiTi within nanoseconds	NEUMANN, Bruno
15:00	[10] Tracking the Behaviour and Recovery of Critical Elements (Bi, In, Sb and Te) in the Zn-Pb Ruwai Skarn Deposit Processing Plant, Kalimantan, Indonesia	FAIZY, Shelly Mardhia
15:15	[21] Positron annihilation spectroscopy: Characterization of defects in superconducting film	KLUG, Sebastian

# Tuesday 26 November 2024

**Scientific Talks: Talks II (09:00 - 10:30)**

-Conveners: Franziska Marie Herrmann; Anju Shaji Nair; Lantian Wang; Daniel Nieder; Pranav Hegde; Christoph Bloß; Artem Govorukhin

time	[id] title	presenter
09:00	[15] The Role of Oxygen during FLASH irradiation of Zebrafish Embryos	GOVORUKHIN, Artem
09:15	[19] Interaction of Highly Charged Ions with Gas Targets	SHAJI NAIR, Anju
09:30	[20] Comparative analysis of next-generation sequencing data from phage display experiments with inorganic target materials	BLOSS, Christoph
09:45	[18] A model experiment for analysing the metal pad roll instability in reduction cells under ambient conditions	HEGDE, Pranav
10:00	[22] A contribution to 3D bubble tracking	WANG, Lantian
10:15	[26] Electronic microplate: A multimodal sensing platform for bioassay monitoring	NIEDER, Daniel

# Wednesday 27 November 2024

## Scientific Talks: Talks III (11:30 - 13:00)

-Conveners: Marc Strassheim; Tanzila Nurjahan; Marcos Vinicius Goncalves Faria; Laura Buarque Andrade; Manuel Bernabei; Phil-Alexander Hofmann; Sahra Homae

time	[id] title	presenter
11:30	[16] Fast Multivariate Function Approximation in Downward Closed Polynomial Spaces	HOFMANN, Phil-Alexander
11:45	[17] Investigations on Carbon Dioxide Sequestration through Wet Carbonation of Wollastonite	HOMAE, Sahra
12:00	[11] Long-term normal tissue side effects of FLASH proton radiotherapy compared to conventional radiotherapy	BERNABEI, Manuel
12:15	[12] Quantitative assessment of global future Lithium supply: Simulating mining projects and predicting production start times	BUARQUE ANDRADE, Laura
12:30	[27] Ultrafast dynamics of Fe <sub>3</sub> Sn <sub>2</sub>	GONCALVES FARIA, Marcos Vinicius
12:45	[24] In-situ moisture measurement in concrete structures of nuclear reactor buildings during decommissioning	NURJAHAN, Tanzila