

# **Tumor Hypoxia - FLASH Radiotherapy Workshop**

**Monday 26 June 2023 - Monday 26 June 2023**

## **Agenda**

09:00 Registration

09:30 Welcome and overview from **GSI-FAIR**

10:00 Welcome and overview from **Baker Ruskin**

10:20 **Ben Wielockx**, Technische Universität Dresden, Germany  
“**Oxygen sensing in cancer: the good, the bad and the ugly**”

11:00 **Ludwig Dubois**, Maastricht University, Netherlands  
“**Tumor Hypoxia from bed to bench and back, a success story?**”

11:40 Coffee break and group photo

12:00 Dominik Fuhrmann: Iron metabolism under hypoxia – A problem in cancer therapy?

12:15 Cristina Totis: The role of hypoxia in the immunogenicity of osteosarcoma cells after photon or carbon ion exposure

12:30 Martina Quartieri: The role of hypoxia and radiation in selecting Circulating Cancer Stem-like cells in vitro

12:45 **Joao Seco**, German Cancer Research Center (DKFZ), Germany  
“**Oxygen dynamics in cells: models and experimental studies**”

13:25 Lunch Break

14:00 GSI-FAIR Tour

15:00 Coffee break

15:20 **Emanuele Scifoni**, Trento Institute for Fundamental Physics and Applications, Italy  
“**The FLASH mechanistic puzzle: Role of experiments at controlled oxygenation**”

16:00 Andrea Scarmelotto: In-vitro FLASH study of spheroids irradiated with proton beam at ultra-high dose rate (1000 Gy/s)

16:15 Frank Van den Heuvel: Assessing the FLASH –effect in different oxygenation environments using multi-cell spheroids —What can we expect: A quantification study.

16:30 Till Böhlen: Tumor efficacy of UHDR compared with CONV irradiation – a quantitative

analysis of published results

16:45 **Pierre Montay-Gruel**, University of Antwerp, Belgium  
**“Importance of tissular oxygen tension for FLASH-RT investigation”**

17:25 Remarks and Conclusions

17:40 End of the workshop