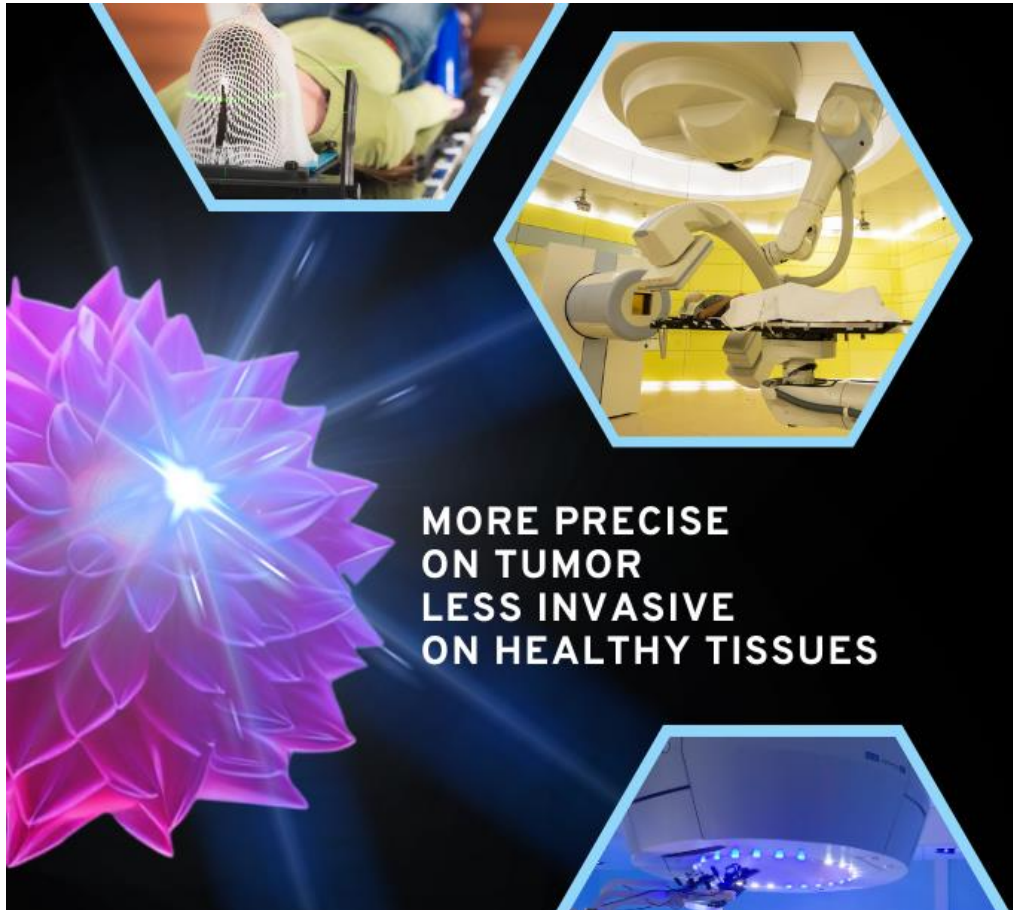


## Clinical Aspects of Heavy Ion Therapy Detailed Programme of Study



Click on the Hyperlinks to access the respective YouTube Course Video

### **Session 1 - Radiobiology**

[Radiobiology and General Introduction – Walter Tinganelli \(GSI\)](#)

[RBE Models – Piero Fossati \(MedAustron\)](#)

[Immunological Effects – Alexander Helm \(GSI\)](#)

[Hypoxia – Piero Fossati \(MedAustron\)](#)

### **Session 2 – Head and Neck**

[Skull Base – Semi Harrabi \(HIT\)](#)

[Central Nervous System – Semi Harrabi \(HIT\)](#)

[Salivary Gland & Paranasal Sinuses – Ester Orlandi \(CNAO\)](#)

[Melanoma – Maciej Pelak \(MedAustron\)](#)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101008548

### **Session 3 - Sarcoma**

[Osteosarcoma - Katharina Seidensaal \(HIT\)](#)

[Chordoma and Chondrosarcoma – Sacrum and Spine - Maria Rosaria Fiore \(CNAO\)](#)

[Ewing and Rhabdomyosarcoma - Carola Lütgendorf-Caucig \(MedAustron\)](#)

[Case Study Sacral Chordoma – Piero Fossati \(MedAustron\)](#)

### **Session 4 – Prostate**

[State of the Art – Razvan Galalae \(Klinikum Bremerhaven\)](#)

[Trial Design - Roberto Orecchia \(IEO\)](#)

[Case Study Prostate – Razvan Galalae \(Klinikum Bremerhaven\)](#)

[Demonstration of the installation of MatRad – Yiota Foka \(GSI, SEEIIST\), Niklas Wahl \(DKFZ\)](#)

### **Session 5 – Organ Motion**

[Abdomen – Silvia Molinelli \(CNAO\) \(1\)](#)

[Abdomen – Silvia Molinelli \(CNAO\) \(2\)](#)

[Examples of Practical Solutions - Piero Fossati – \(MedAustron\)](#)

### **Session 6 – Treatment Planning**

[Introduction to Treatment Planning – Joao Seco \(DKFZ\)](#)

[Treatment Planning with MatRad I – Joao Seco, Niklas Wahl \(DKFZ\)](#)

[Treatment Planning with MatRad II – Yiota Foka \(GSI, SEEIIST\)](#)

[Treatment Planning with MatRad II – Joao Seco, Niklas Wahl \(DKFZ\)](#)

### **Session 7 – Re-Irradiation**

[Central Nervous System - Semi Harrabi \(HIT\)](#)

[Case Study – Salivary Gland and Paranasal Sinus – Rossana Ingargiola \(CNAO\)](#)

### **Session 8 – Innovative Methods**

[Linear Energy Transfer Painting – Piero Fossati \(MedAustron\)](#)

[Spatial Fractionation – Slavisa Tubin \(MedAustron\)](#)

[Heavy Ion Therapy Integration with Immune and Target Drugs - Slavisa Tubin \(MedAustron\)](#)

### **Session 9 – Gynae and Rare Indications**

[Gynaecological Melanoma and Oligomet Ovarian Cancer – Amelia Barcellini \(CNAO\)](#)

[Adenoid Cystic Carcinoma – Thomas Held \(HIT\)](#)

[Paediatric - Semi Harrabi \(HIT\)](#)



## **Session 10 – Methodologies – Present and Future Clinical Trials**

[The Heidelberg Approach - Semi Harrabi \(HIT\)](#)

[The French-Italian Trial – Jacques Balosso \(ARCHADE\)](#)

[CNAO Trials – Ester Orlandi \(CNAO\)](#)

[Sacro Trial - Piero Fossati \(MedAustron\)](#)

[PROSPER Trial – Bradford Hoppe \(Mayo\)](#)

[CIPHER Trial – Arnold Pompos \(UTSW\)](#)

[SHIPP Trial – Mack Roach \(UCSF\)](#)

[Round Table Clinical Trials – Semi Harrabi \(HIT\), Mack Roach \(UCSF\), Jacques Balosso \(ARCHADE\),](#)

[Bradford Hoppe \(Mayo\), Piero Fossati \(Med Austron\), Arnold Pompos \(UTSW\), Tatsuya Ohno](#)

[\(GHMC\), Ester Orlandi \(CNAO\)](#)

[Knowledge Transfer in Heavy Ion Therapy Research - Manuela Cirilli \(CERN\)](#)

## **Other Video Resources**

[Hadron Therapy Facility](#)

[Heavy Ion Therapy Research Integration - Transnational Access](#)

[HITRIplus Beam Access](#)

[CNAO – The Particle Travel](#)

[HIT - World Class Oncology at Heidelberg University Hospital](#)

[MedAustron patient treatment](#)

[MedAustron in a Nutshell](#)

[Cosylab radiotherapy products suite](#)

[GSI- FAIR – The Universe in the Laboratory](#)

[CERN - From particle physics to medicine](#)

[ENLIGHT: Hadron-therapy in Europe](#)

[Hadrontherapy](#)

[CERN:HIT – A New Dimension in Cancer Therapy](#)

[New Horizon in Cancer Care: Heavy Ion Radiotherapy – Medical Frontiers](#)

