

E-Learning Courses on Heavy Ion Therapy Research



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

3 Online Courses on Heavy Ion Therapy Research

Treatment Planning



Heavy Ion Therapy MasterClass School | 17-22 May 2021
Online Course

The program is intended for the students of the following disciplines: Medical Physics, Physics, Radiotherapy, Radiology, Biomechanics and Imaging and Radiotherapy Technicians and early stage researchers.

In collaboration with:

Topics:

- Particle Therapy
- Radiation Protection
- Imaging
- Accelerator Physics
- Beam Delivery

Scope:

Focus on Heavy Ion Therapy Treatment Planning Systems (TPS) including lectures, treatment planning tool demonstrations, hands-on exercises and student projects.

Registration deadline: 15 May 2021

Programme Committee:

- Y. Foka (SIU/IRMI, Chair)
- A. Gashgashvili-Boudaibide (IPNSA)
- N. Sammut (IHH, MURA)
- M. Sgropicki (DESY)
- J. Seo (DKFZ)
- M. Vesterin (CERN)
- N. Wahl (DKFZ)
- H.P. Wieser (LMU)

Scientific Assistants:

- A. Mamas (AUTH/CERN)
- A. Kahl (EPFL/CERN)
- D. Sarigi (IPNSA/DAVZ)
- R. Taylor (CERN)

HITRI
Heavy Ion Therapy Research Integration

Medical Physics and Engineering



4-8 JULY 2022
FREE ONLINE ZOOM COURSE

SPECIALISED COURSE ON HEAVY ION THERAPY RESEARCH

REGISTER NOW BY
June 25, 2022
<https://indi.to/Q77kd>

SCIENTIFIC COMMITTEE

- Majid Dinevari, Chair, Oxford Univ./SEEST
- Richard Sattler, Co-Chair, Univ. of Mainz
- Vijay Anand, TERA foundation
- Giovanni Anelli, CERN
- Wolfgang Assmann, Muncheng 1st Beam TC
- Steno Bennekow, SEEST
- Eleanor Beatty, LMU, Jülich
- Jeff Buchsbaum, NCI
- Marina D'Amico, Aon-ADAM
- Ashini Ganesan, EBA/Mod
- Maria Giampaola Bongioli, UIn of Pisa
- Christian Graf, GSI
- Alexander Gombart, PARTREC
- Angela Faccetti, CNAO
- Yusei Foka, GSI
- Piero Ferrari, MedAustron
- Karen Kelly, Manchester Univ
- Kenneth Ling, Imperial College
- Guilia Magrin, MedAustron
- Andreas Matzke, IFT
- Monica Neuchl, CNAO
- Kurtis Parikh, LMU
- Marco Palla, CNAO
- Ash Radwan, CERN
- Yusei Foka, GSI
- Sandra Rossi, CNAO
- Marlou Spinelli, PSI
- Thomas Schuster, MedAustron
- Maria Schreier, MedAustron
- Jose Sosa, DKFZ
- Luka Sepetec, Comlab
- Stefan Steyler, MedAustron Univ., Wien
- Lambert Stroh, Technische Univ., Wien
- Paolo Garcia Tello, CERN
- Stefano Zini, Muncheng 1st Beam TC

FOR MASTER'S, PHD AND POSTDOC RESEARCHERS

Clinical Aspects



HITRI
Heavy Ion Therapy Research Integration

3rd HITRIplus School
SPECIALIZED COURSE ON CLINICAL ASPECTS OF HEAVY ION THERAPY RESEARCH
3 - 7 July 2023 ONLINE

SCIENTIFIC AND ORGANISING COMMITTEE:

- P. Fassati chair (MedAustron)
- E. Orlandi (CNAO)
- S. Harrabi (HIT)
- S. Yamada (OST)
- Y. Foka chair (GSI/SEEST)
- M. Cirilli (CERN)
- N. Sammut (UIn, Malta)

SCIENTIFIC ASSISTANTS:

- D. Giannakaki (AUTH)
- I. Mitsou (AUTH)
- K. Kottlitz (AUTH)
- K. Kottlitz (AUTH)
- A. Puckett Anastasiou (AUTH)
- E. Theodoridou chair (AUTH)
- E. Xanthopoulos (AUTH)
- M. Dallas (AUTH)

Topics:

Radiobiology, Head-and-Neck, Sarcoma, Prostate, Liver, Pancreas, Gyna and Rare Indications, Re-irradiation, Organ Motion, Treatment Planning, Innovative Methods, Present and Future Clinical Trials

CLICK AND DISCOVER THE PROGRAMME

THE REGISTRATION IS OPEN UNTIL June 25, 2023
<https://indico.cern.ch/event/1248018>

Course 1 – Treatment Planning

Faculty: 36 lecturers

Chair: Yiota Foka (GSI)

Views: circa 3000 to date

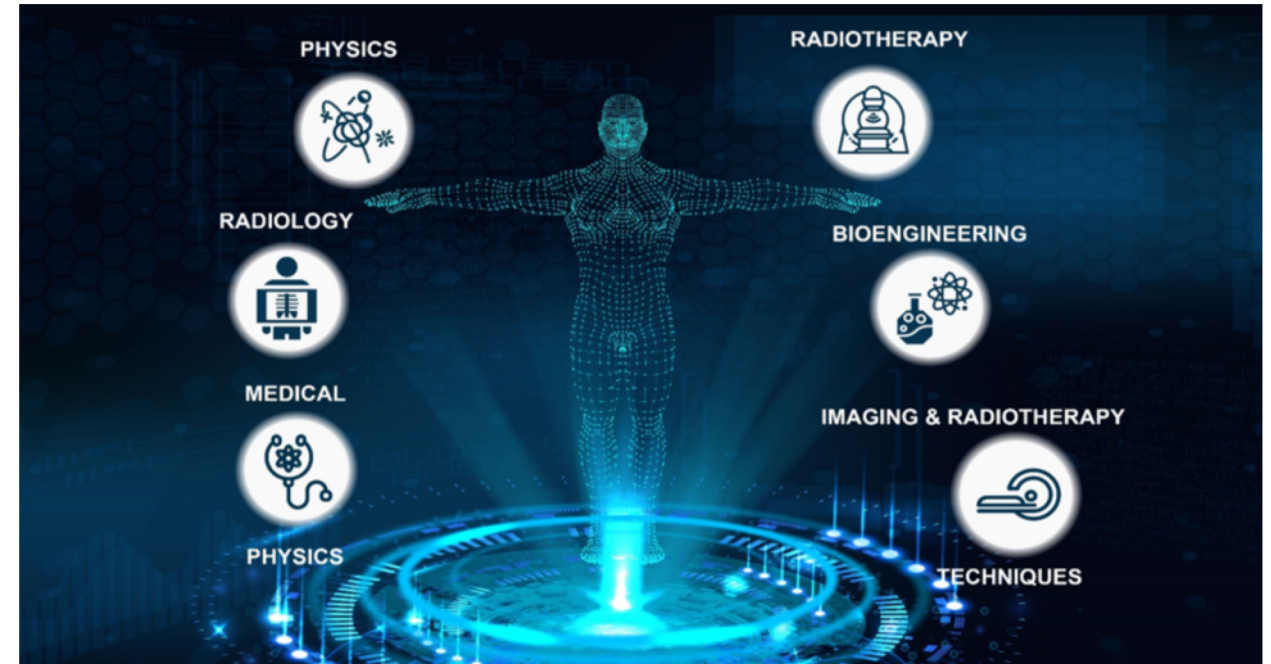
Duration: 34 hours

Language: English

Fees: Free

Learning Outcomes:

- underpinning theory, techniques and methods
- design and planning skills
- technical knowledge on the design of heavy ion therapy machines
- analytical, critical and evaluation skills of treatment scenarios



Course 1 – Treatment Planning

1. Amer Ajanović ICL
2. Elena Benedetto SEEIIST
3. Uta Bilow TU Dresden
4. Giovanni Bisoffi INFN
5. Manuella Cirili CERN
6. Haris Dapo ANKARA Univ./TARLA
7. Mirza Dautbasic UNSA
8. Manjit Dosanjh ENLIGHT/SEEIIST/CERN
9. Ana Đorđević CERN
10. Angelica Facoetti CNAO
11. Yiota Foka GSI/EMMI
12. Piero Fossati MedAustron
13. Nadia Gambino MedAustron
14. Christian Graeff GSI
15. Milkos Jaksic IRB
16. Silvia Meneghello CNAO
17. Uros Mitrović Cosylab JSC
18. Silvia Molinelli CNAO

19. Monica Necchi CNAO
20. Ester Orlandi CNAO
21. Matej Polzelnik Cosylab JSC
22. Marco Pullia CNAO
23. Ash Ravikumar CERN
24. Mimoza Ristova UKIM
25. Mariusz Sapinski SEEIIST
26. Joao Seco DKFZ
27. Rebecca Taylor ICL
28. Markus Stock MedAustron
29. Dasa Stupica Cosylab JSC
30. Albana Topi GSI
31. Slavisa Tubin MedAustron
32. Vasilis Vlachoudis CERN
33. Maurizio Vretenar CERN
34. Niklas Wahl DKFZ
35. Hans Peter Wieser LMU

Course 2 – Medical Physics and Engineering

Faculty: 36 lecturers

Chair: Manjit Dosanjh (SEEIIST & Uni Oxford)

Views: circa 3200 to date

Duration: 35 hours

Language: English

Fees: Free

Learning Outcomes:

- underpinning theory, techniques and methods
- specialised medical physics knowledge
- technical expertise in fundamental building blocks
- analytical, critical and evaluation skills of medical physics and engineering



Course 2 – Medical Physics and Engineering

Organising committee:

Manjit Dosanjh (SEEIIST) (Chair)
Monica Necchi (CNAO)
Angelica Facoetti (CNAO)
Petya Georgieva (SEEIIST/CERN)
Nicholas Sammut (Uni Malta)
Rebecca Taylor (CERN)
Joseph Bateman (Uni Oxford)
Cameron Robertson (Uni Oxford)
Kristaps Palskis (CERN)

Scientific Committee - Manjit Dosanjh (in the chair)

Ugo Amaldi (TERA)
Maurizio Vretenar (CERN)
Elena Benedetto (SEEIIST)
Mariusz Sapinski (PSI)
Kenneth Long (Imperial College)
Klemens Zink (Marburg-MIT)
Eleanor Blakely (Berkeley)
Piero Fossati (MedAustron)
Karen Kirby (INSPIRE - Uni Manchester)
Alex Gerbershagen (Uni Groeningen)
Angelica Facoetti (CNAO)
Monica Necchi (CNAO)
Nicholas Sammut (Uni Malta)
Sandro Rossi (CNAO)
Giovanni Anelli (CERN)
Mario Schrenk (MedAustron)
Thomas Schreiner (MEdAustron)
Yiota Foka (GSI)
Suzie Sheehy (Uni – Melbourne)
Andrea Mairani
Joao Seco (DKFZ)
Anna Subiel (NPL)
Marco Pullia (CNAO)
Lucio Rossi (INFN)
Giusy Bisogni (INFN)
Katia Parodi (Uni Munich)
Steve Myers (ADAM)
Adriano Garonna (EBAMED)
Manuela Cirilli (CERN)

Course 3 – Clinical Aspects

Faculty: 27 lecturers

Chair: Yiota Foka (GSI & SEEIIST) & Piero Fossati (MedAustron)

Views: circa 14,500 to date

Duration: 27 hours

Language: English

Fees: Free

Learning Outcomes:

- underpinning theory, techniques and methods
- specialised clinical knowledge on the design of heavy ion therapy machines
- analytical, critical and evaluation skills of clinical aspects



Course 3 – Clinical Aspects

Piero Fossati	MedAustron	Maciej Pelak	MedAustron
Ester Orlandi	CNAO	Maria Bonora	CNAO
Semi Harrabi	HIT	Maria Rosaria Fiore	CNAO
Yiota Foka	GSI/SEEIIST	Mack Roach	UCSF
Manuela Cirilli	CERN	Niklas Wahl	DKFZ
Arnold Pompos	UTSW	Razvan Galalae Klinikum	Bremerhaven
Amelia Barcellini	CNAO	Roberto Orecchia	IEO
Alexander Helm	GSI	Rossana Ingargiola	CNAO
Barbara Vischioni	CNAO	Silvia Molinelli	CNAO
Bradford S. Hoppe	Mayo Clinic	Slavisa Tubin	MedAustron
Carola Lütgendorf-Caucig	MedAustron	Thomas Held	HIT
Giulia Riva	CNAO	Walter Tinganelli	GSI
Jacques Balosso	ARCHADE		
Joao Seco	DKFZ		
Katharina Seidensaal	HIT		

Top Institutions World-Wide

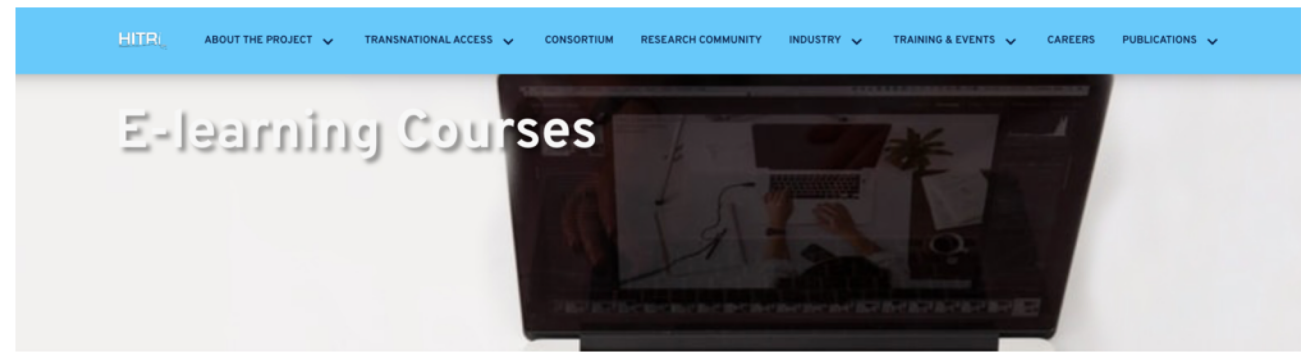


& Edmond Offermann
(Private Sponsor)



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Snapshot



Hitriplus e-learning courses on Heavy Ion Therapy Research



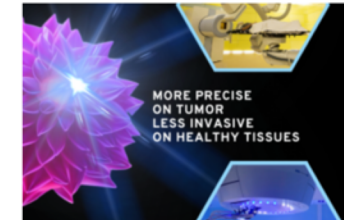
Course 1 Treatment Planning

[About the Programme](#) * (*)
[Course Video Playlist](#) * (*)
[Download Documentation](#) * (*)



Course 2 Medical Physics and Engineering

[About the Programme](#)* (*)
[Course Video Playlist](#)* (*)
[Download Documentation](#)* (*)



Course 3 Clinical Aspects

[About the Programme](#) * (*)
[Course Video Playlist](#)* (*)
[Download Documentation](#)* (*)

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Snapshot

The screenshot shows a YouTube channel page for 'MasterClass School' with a playlist of 9 videos. The channel name is 'MasterClass School | Online Course' and the playlist title is 'Heavy Ion Therapy MasterClass School May 17 - May 21, 2021'. The channel is associated with 'HITRIplus' and has 37 videos, last updated on 29 Jul 2022. The playlist includes the following videos:


- Particle Therapy Overview by Manjit Dosanjh (22 views, 5 months ago, 58:15)
- Cancer Data Statistics by Mimoza Ristova (10 views, 5 months ago, 23:02)
- A brief introduction to particle accelerators by Maurizio Vretenar (16 views, 5 months ago, 1:48:44)
- Cancer Radiotherapy Introduction by Joao Seco (8 views, 5 months ago, 1:16:00)
- MatRad General Introduction by Hans Pieter Wieser (12 views, 5 months ago, 7:25)
- MatRad General Introduction by Niklas Wahl (47 views, 5 months ago, 51:32)
- Hands-On: MatRad Installation & Data by Niklas Wahl and Hans Peter Handson (28 views, 5 months ago, 1:20:38)
- Introduction to the Heavy Ion Therapy Master Class School, May 17 2021 (20 views, 5 months ago, 41:48)
- Accelerator Physics by Mariusz Sapinski (10 views, 5 months ago, 1:22:47)
- Ion sources by Nadia Gambino (4 views, 5 months ago)

A Few Snapshots




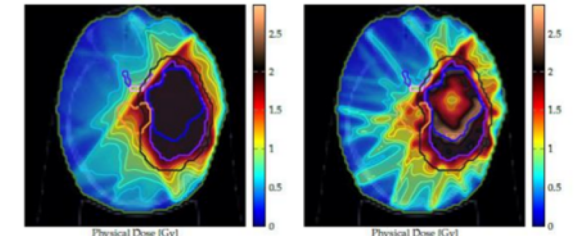
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tumors of the central nervous system



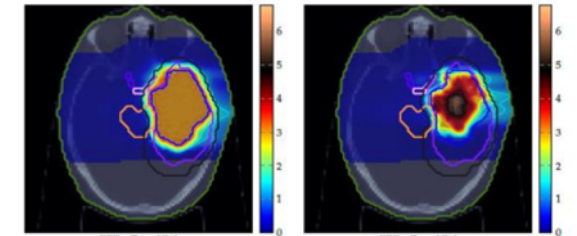
DR. MED. SEMI B. HARRABI
HIT
HEIDELBERG ION-BEAM THERAPY CENTER

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(a) Photon fraction dose Reference plan

(b) Photon fraction dose Joint optimized plan



(d) Carbon ion fraction dose Reference plan

(e) Carbon ion fraction dose Joint optimized plan

Link

<https://www.hitriplus.eu/>

*Look for Training and Events from the
Top Navigation bar and select E-Learning Courses*

