SCUOLA SUPERIORE
DI FISICA IN MEDICINA
PIERO CALDIROLA

Direttore: Annalisa Trianni

Residential Course

COURSE ON THE BASIS OF SBRT FOR PHYSICISTS

MILAN • 25 - 27 May 2022

Course director: Pietro Mancosu, Milan

Italian CME data (ECM)
Evento ECM n. 416-348965

Crediti assegnati: 16

Professioni: Fisico-Medico Chirurgo (discipline: Oncologia, Radioterapia, Medicina Nucleare, Neuroradiologia, Radiodiagnostica).

Obiettivo formativo: contenuti tecnico-professionali (conoscenze e competenze) specifici di ciascuna professione, di ciascuna specializzazione e di ciascuna attività ultraspecialistica, ivi incluse le malattie rare e la medicina di genere.

Provider ECM

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Objectives

Modern radiotherapy is increasingly evolving towards a reduction in the number of fractions. Stereotactic body radiotherapy (SBRT), or as more recently defined, SABR (stereotactic ablative body radiotherapy), is a radiation therapy approach in which high radiation doses are delivered in few fractions focused on small extracranial tumors with rapid dose fall off outside the target.
In particular, SBRT/SABR is becoming elective therapy in several anatomic districts, both for primitive tumors and for metastatic lesions.
Technological progress both in imaging and in treatment delivery has favored the adoption of this technique.
The main aim of this three-day course is to help medical physicists working in both large and small centers, to learn the proper implementation of effective SBRT treatment practice.
The course is specifically designed for medical physicists, however, Radiation Oncologists, radiation therapists and other professional figures working in RT are welcome to join as well.

SCIENTIFIC PROGRAMME

Wednesday May 25, 2022

Session 1
Introducing SBRT: Radiobiology and Clinical Issues
Chairs: C. Cavedon, Verona - C. Lenardi, Milan

13:30 Terminology and History of SBRT. *G. Gagliardi, Stockholm*

14:15 Radiobiology Rationale of SBRT: Tumor Prospective. *T. Rancati, Milan*

15:00 An Overview of Major Clinical Iindications and Ongoing Trials. *B. Jereczek-Fossa, Milan*

15:45 *Coffee break*

Session 2
Imaging for Volumes Definition from a Physicist Prospective
Chair: L. Spiazzi, Brescia

16:15 PTV Margins for SBRT. *M. Van Herk, Manchester*

17:00 Imaging for Target Definition for Non Moving Targets (Brain and Spine). *E. Pignoli, Milan*

17:45 Imaging for Target Definition in Moving Targets (Lung, Liver and Prostate). *P. Mancosu, G. Reggiori - Milan*

Thursday May 26, 2022

Session 3
Dosimetry&Planning in SBRT / I
Chair: C. Garibaldi, Milan

8:30 Small Field Dosimetry (Formalism and Measurements). *S. Russo, Florence*

9:15 Algorithms for Dose Calculation and Commissioning. *A. Stravato, Rome*

10:00 BriXsino compact Compton Source for Medical Applications. *C. Lenardi, Milan*

10:45 *Coffee break*

Session 4
Dosimetry&Planning in SBRT / II
Chair: A. Monti, Milan

11:15 Dose Limits for Organs at Risk in SBRT. *C. Fiorino, Milan*

12:00 SBRT Planning for Non Moving Targets (Brain and Spine). *E. De Martin, Milan*

12:45 SBRT Planning for Moving Targets (Liver, Lung and Prostate). *F. Giglioli, Turin*

13:30 *Lunch*

Session 5
Image Guided RT
Chair: V. Tremolada, Milan

15:00 Overview of Available Delivery Techniques. *C. Garibaldi, Milan*

15:45 X-ray Guided&MRI SBRT: Intra-fraction Monitoring, Gating and Tracking. *M. Van Herk, Manchester*

16:30 X-ray Guided SBRT: Inter-fraction Monitoring and Correction. *L. Strigari, Bologna*

17:15 Guidance Systems with Non-ionizing Radiation Systems. *S. Russo, Florence*

Friday May 27, 2022

Session 6
QA and Safety
Chair: P. Mancosu, Milan

8:15 Specific QA for Linac SBRT and Dedicated Machines. *S. Broggi, Milan*

9:00 Patient Pre-treatment QA and In-vivo Dosimetry. *M. Esposito, Florence*

9:45 FMEA Approach in SBRT. *I. Veronese, Milan*

10:30 *Coffee break*

Session 7
Complementary
Chair: M. Stasi, Turin

11:00 AI and radiomics in SBRT. *C. Fiorino, Milan*

11:45 SBRT in Proton Therapy: a Physics Prospective. *M. Ciocca, Pavia*

12:30 Harmonization of SBRT Procedure and Dose Reporting. *P. Mancosu, Milan*

13:15 Remarks and Conclusions.

ENDORSMENTS

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Thursday May 26, 2022 • SATELLITE SYMPOSIA *(non accreditati ECM)*

13:45 SBRT and autocontouring AI: contours are the foundation of the treatment plan? *C. de Almeida Ribeiron - Dosimetrica*

14:00 Accuracy and efficiency for SRS & SBRT QA. *G. Bartesaghi - Else*

14:15 Gestione del paziente tramite SGRT e analisi end-to-end del trattamento: strumenti a supporto della pratica clinica. *G. Cattani - Tecnosan*

14.30 Nuove sinergie fra Linac-QA e Patient-QA per una verifica rapida, efficiente ed efficace del piano di trattamento *D. Raspanti - Tema Sinergie*

14:45 What's new in SRS/SBRT patient and machine QA. *F. Castellano - Tecnologie Avanzate*

INFORMATION

VENUE
Fondazione UNIMI • Viale Ortles 22/4, Milano

OFFICIAL LANGUAGE
English (simultaneous translation will not be provided).

REGISTRATION FEES
AIFM, AIRO, ESTRO, THASTRO.
Members: 200,00 €
Non Members 400,00 €
Students AIFM AIRO Members (20 places available): 50,00 €

The fee includes: admission to all scientific sessions, course kit, refreshments as per program.

REGISTRATION PROCEDURES
The course will be accredited for 80 participants.
The capacity of the main room is 95 seats. More information is available on the website: *www.fisicamedica.it/formazione*.
Applications for registration will be accepted according to the chronological order of arrival.
The registration will be confirmed after the payment of the fee (wire transfer or credit card are available).
Deadline for payment: **May 11, 2022**.

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