



SCUOLA SUPERIORE
DI FISICA IN MEDICINA
PIERO CALDIROLA

Direttore: Carlo Cavedon

COURSE ON THE BASIS OF SBRT FOR PHYSICISTS

MILAN • 25-27 March 2020

Course director: Pietro Mancosu, Milan



Italian CME data (ECM)

Evento in fase di accreditamento

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. Malattie rare.



Associazione Italiana di Fisica Medica - AIFM
Piazza della Repubblica 32 - Milano
www.aifm.it

Comitato Scientifico AIFM

Carlo Cavedon

Coordinatore del CS e Direttore della Scuola Caldirola

E. Amato, P. Appendino, G. Belli, M. Ciocca, F. Fioroni, V. Landoni,
A. Lascialfari, M. Maccauro, E. C. Mattioli, E. Moretti, P. Orlandi,
O. Rampado, V. Rossetti, P. Russo

Course Director:

Pietro Mancosu, Milano

Humanitas Cancer Center, Rozzano (Milano)
pietro.mancosu@humanitas.it

Scientific Committee:

Cristina Garibaldi, Milano

Istituto Europeo di Oncologia, Milano
cristina.garibaldi@ieo.it

Cristina Lenardi, Milano

Università di Milano, Dipartimento di Fisica "Aldo Pontremoli"
cristina.lenardi@unimi.it

Claudio Fiorino, Milano

UO Fisica Sanitaria, Ospedale San Raffaele - Milano
fiorino.claudio@hsr.it

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.



Wednesday March 25, 2020

Session 1

Introducing SBRT: Radiobiology and Clinical Issues

Chair: M. Stasi, Torino

- 13:30 Welcome greetings. *C. Lenardi, Milano*
- 13:35 Terminology and History of SBRT. *P. Mancosu, Milano*
- 14:20 Radiobiology Rationale of SBRT: Tumor Perspective.
T. Rancati, Milano
- 15:05 IEO: an Overview of Major Clinical Indications and Ongoing Trials. *B. Jereczek, Milano - G. Marvasio, Milano*
- 15:50 *Coffee break*

Session 2

Imaging for Volumes Definition from a Physicist Perspective

Chair: L. Spiazzi, Brescia

- 16:20 Imaging for Target Definition for Non Moving Targets (Brain and Spine). *E. Pignoli, Milano*
- 17:05 Imaging for Target Definition in Moving Targets (Lung, Liver Pancreas and Prostate). *C. Cavedon, Verona*
- 17:50 PTV Margins for SBRT. *C. Fiorino, Milano*

Thursday March 26, 2020

Session 3

Dosimetry&Planning in SBRT / I

Chair: C. Fiorino, Milano

- 8:30 Small Field Dosimetry (Formalism and Measurements).
S. Russo, Firenze
- 9:15 Algorithms for Dose Calculation and Commissioning.
G. Reggiori, Rozzano
- 10:00 Planning Issues in SBRT. *C. Garibaldi, Milano*
- 10:45 *Coffee break*

Session 4

Dosimetry&Planning in SBRT / II

Chair: A. Monti, Milano

- 11:15 Dose Limits for Organs at Risk in SBRT. *C. Fiorino, Milano*
- 12:00 SBRT Planning for Non Moving Targets (Brain and Spine).
E. De Martin, Milano



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

13:30 *Lunch*

Session 5

Image Guided RT

Chair: V. Tremolada, Monza

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

15:45 Guidance systems with Non-Ionizing Radiation Systems.
S. Russo, Firenze

16:30 X-ray Guided SBRT: Inter-Fraction Monitoring and Correction.
L. Strigari, Roma

17:15 X-ray Guided SBRT: Intra-Fraction Monitoring, Gating
and Tracking. *C. Cavedon, Verona*

Friday March 27, 2020

Session 6

QA and Safety

Chair: P. Mancosu, Milano

8:30 Patient Pre-treatment QA and In-vivo Dosimetry.
M. Esposito, Trento

9:15 Specific QA for Linac SBRT and Dedicated Machines.
S. Broggi, Milano

10:00 FMEA Approach in SBRT. *I. Veronese, Milano*

10:45 *Coffee break*

Session 7

Complementary

Chair: C. Garibaldi, Milano

11:15 Radiology and Radiotherapy with Compact Compton
Sources: the MariX Project. *C. Lenardi, Milano*

12:00 SBRT in Proton Therapy: a Physics Perspective.
M. Ciocca, Pavia

12:45 Harmonization of SBRT Procedure and Dose Reporting.
P. Mancosu, Milano

13:30 Remarks and conclusions.



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INFORMATION



VENUE

Fondazione Filarete UNIMI • Viale Ortles 22/4, Milano

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: **March 11, 2020.**

ORGANIZING SECRETARIAT

We are
SYMPOSIUM

Symposium srl
Infoline 011 921.14.67
Fax 011 922.49.92

segreteria.aifm@symposium.it
www.symposium.it

