

Joint ICTP-IAEA International Workshop on the Implementation of Image Guided Radiotherapy (IGRT) | (smr 3114)

Monday, 8 May 2017

09:00 - 17:00

Session 1

09:00 **REGISTRATION and ADMINISTRATIVE FORMALITIES 1h0'**

Upon arrival, all VISITORS are kindly requested to complete Registration formalities at the Adriatico Guest House as follows:

- *Participants staying in the ICTP Guesthouses:
upon check-in, register with the Adriatico Guest House reception desk staff*
- *Participants NOT staying in the ICTP Guesthouses:
on Monday, 8 May, from 9.00 to 10.00, Adriatico Guest House, lower level 1
(subsequently, from Tuesday - Friday c/o Secretariat, Office no. 1 at the
Adriatico Guest House)*
- *Associates / Federation Scheme / KFAS visitors should register at the
Leonardo da Vinci Building, 1st floor, rooms 113/114/118*

10:00 **ICTP Welcome Remarks 15'**

Speaker: Luciano BERTOCCHI (ICTP, Trieste)

10:15 **IAEA Welcome Remarks 15'**

Speaker: Brendan HEALY (IAEA, Vienna, Austria)

10:30 **Coffee break 30'**

11:00 **Definition of IGRT, Clinical need for IGRT 1h0'**

(Participants Pre-Course Quiz)

Speaker: Tomas KRON (Peter MacCallum Cancer Centre, Melbourne, Australia)

12:00 **IGRT Technology and Processes 1h0'**

Speaker: Daniel BOURLAND (Wake Forest School of Medicine, Winston-Salem, U.S.A.)

13:00 **Lunch break 1h0'**

14:00 **Advanced IGRT: Motion Management 1h0'**

Speaker: Tomas KRON

15:00 **AAPM Recommendations on IGRT 45'**

Speaker: Daniel BOURLAND

15:45 **Group Photo & Coffee Break 15'**

weather permitting, Group Photo to be taken outside on the terrace

16:00 **Discussion and Q&A 1h0'**

Tuesday, 9 May 2017

09:00 - 18:00

Session 2

09:00 **Corrective Strategies and CTV-PTV Margins in Radiotherapy 1h0'**

Speaker: Tomas KRON

10:00 **QC Part I: Planar X-ray Imaging 30'**

Speaker: Annalisa TRIANNI (Ospedale S. Maria della Misericordia, Udine, Italy)

10:30 **Coffee break 30'**

11:00 **Acceptance and Commissioning of IGRT Technology 1h0'**

Speaker: Daniel BOURLAND

12:00 **QC Part II: Volumetric X-ray Imaging 1h0'**

Speaker: Annalisa TRIANNI

13:00 **Lunch break 1h0'**

14:00 **Group A - CTV-PTV Margin Calculations Demonstration of DR QC Equipment 3h0'**

15:00 **Group B - Maggiore Hospital - Practicals 3h0'**

1. *IGRT QC (EPID), kV planar, kV (CBCT)*
2. *IGRT end-to-end test*

Wednesday, 10 May 2017

09:00 - 18:00

Session 3

09:00 **Patient Dosimetry in IGRT 1h0'**

Speaker: Daniel BOURLAND

10:00 **RT QC Procedures for Planar Imaging for IGRT 30'**

Speaker: Tomas KRON

10:30 **Coffee break 30'**

11:00 **IAEA Activities in RT Education and Training 30'**

Speaker: Giorgia LORETI (IAEA, Austria, Vienna)

Material:  **Slides**

11:30 **RT QC Procedures for Volumetric Imaging for IGRT 30'**

Speaker: Daniel BOURLAND

12:00 **IGRT in Adaptive Radiotherapy 1h0'**

Speaker: Tomas KRON

13:00 **Lunch break 1h0'**

14:00 **Group B - CTV-PTV Margin Calculations Demonstration of DR QC Equipment 3h0'**

15:00 **Group A - Maggiore Hospital - Practicals 3h0'**

1. *IGRT QC (EPID, kV planar, kV CBCT)*
2. *IGRT end-to-end test*

Thursday, 11 May 2017

09:00 - 21:00

Session 4

09:00 **Imaging in Radiotherapy Treatment Planning 1h0'**

Speaker: Daniel BOURLAND

10:00 **Radiation Safety and Protection and Regulatory Requirements for IGRT 30'**

Speaker: Daniel BOURLAND and Brendan HEALY

10:30 **Coffee break 30'**

11:00 **4DCT and 4DCBCT in IGRT 1h0'**

Speaker: Christian FIANDRA (Universita' degli Studi di Torino, Italy)

12:00 **QC of Motion Management in Radiotherapy 1h0'**

Speaker: Carlo CAVEDON (Universita' degli Studi di Verona, Italy)

13:00 **Lunch break 1h0'**

14:00 **Resources and Staffing for IGRT: IAEA Guidance 1h0'**

Speaker: Brendan HEALY

15:00 **Reports of Results of Practical Exercises (Participants) 45'**

15:45 **Coffee break 15'**

16:00 **Participants Quiz 1h0'**

18:30 **RECEPTION** 2h30'

to be held outside on the terrace (weather permitting)

Friday, 12 May 2017

09:00 - 14:00

Session 5

09:00 **Emerging Trends in Radiotherapy** 30'

Speaker: Tomas KRON

09:30 **Discussion Panel on Emerging Trends (All)** 30'

10:00 **Coffee break** 30'

10:30 **Quiz Review** 30'

11:00 **Conclusions and Recommendations** 30'

11:30 **Course Evaluation** 30'

12:00 **Course Closure** 30'