

SCIENTIFIC PROGRAMME

Course Directors:Luca Boldrini
Uulke van der Heide**Faculty:**Cihan Gani
Sebastian KlüterFaisal Mahmood
Helen McNairStella Mook
Vincenzo Valentini

MCQ TEST

All participants to this course are required to complete 2 MCQ tests with questions about the course content. It will be twice the same test.

The first MCQ test will be launched on 21 September and must be taken by 5 October.

Between 3 and 7 November you are requested to take out the second MCQ test. During the final webinar on 9 November all MCQs will be discussed.

PRE-RECORDED LECTURES

As from 7 October pre-recorded lectures will be available for participants to study at their own pace **prior** to the Q&A webinar sessions. The pre-recorded lectures will be available from ESTRO Moodle.

LIVE WEBINARS from 7 October to 9 November 2021

During the live webinars, the pre-recorded lectures will be discussed. However all course related questions can be addressed at any webinar. These webinars will not be recorded.

Participants will have the opportunity to chat with the faculty during the live webinar sessions.

Zoom invitations to these webinars will be sent prior to the webinars.

Track legend: MP (Medical physicists), RO (Radiation oncologists), RTT (RTTs)

The programme schedule corresponds to CET (Brussels) timing. Students are invited to address questions for the Q&A sessions before each session via the ESTRO Moodle Forum.

These webinars will not be recorded.

1 – THURSDAY 7 OCTOBER

Time CET	Webinar topic	Faculty
14:00-14:20	Welcome and Introduction to the course	Course directors and full faculty
14:20-14:45	Introduction: From IGRT to in-room MRI-Guided Radiotherapy, the technology perspective <i>by U. van der Heide</i>	U. van der Heide
14:45-15:00	Introduction: From IGRT to in-room MRI-Guided Radiotherapy, the medical perspective	V. Valentini
15:00-15:20	Introduction: From IGRT to in-room MRI-Guided Radiotherapy, the RTT perspective	H. McNair
15:20-15:30	Q&A	

2 – WEDNESDAY 13 OCTOBER

Time CET	Track	Webinar topic	Faculty
09:00-10:00		Q&A session about the following topics/pre-recorded lectures:	
	ALL DISCIPLINES	<ul style="list-style-type: none"> • Introduction: From IGRT to in-room MRI-Guided Radiotherapy, the technology perspective <i>by U. van der Heide</i> – 25'19" • Introduction: From IGRT to in-room MRI-Guided Radiotherapy, the medical perspective <i>by V. Valentini</i> – 13' • Introduction: From IGRT to in-room MRI-Guided Radiotherapy, the RTT perspective <i>by H. McNair</i> – 17'45" • MR-simulation and MR-guided Radiotherapy: common aspects and differences <i>by F. Mahmood</i> – 42'52" • Clinical workflow of an in-room MRI-Guided Radiotherapy treatment <i>by L. Boldrini</i> – 42'11" • Hybrid MR-guided RT machines: Low field vs. high field <i>by S. Klüter</i> – 53'48" 	L. Boldrini F. Mahmood H. McNair V. Valentini U. van der Heide

3 – TUESDAY 19 OCTOBER

Time CET	Track	Webinar topic	Faculty
14:00-15:00		Q&A session about the following topics/pre-recorded lectures:	
	MP	<ul style="list-style-type: none"> • Patient-specific QA in online adaptive MRgRT <i>by S. Klüter</i> – 55'55" 	L. Boldrini C. Gani
	MP	<ul style="list-style-type: none"> • Quality Control for MR in Radiotherapy <i>by U. van der Heide</i> – 26'04" 	S. Klüter H. McNair
	MP	<ul style="list-style-type: none"> • Motion management with MRI gating <i>by F. Mahmood</i> – 53'38" 	U. van der Heide
	RO/RTT	<ul style="list-style-type: none"> • MR Physics: Basic Introduction <i>by U. van der Heide</i> – 27'03" 	
	RO/RTT		
	RO	<ul style="list-style-type: none"> • Artifacts in MRI: clinical point of view <i>by F. Mahmood</i> – 49'26" 	
	RO	<ul style="list-style-type: none"> • Clinical Experience in MR-guided Radiotherapy <i>by L. Boldrini</i> – 34'08" and <i>C. Gani</i> – 36'08" 	
	RTT	<ul style="list-style-type: none"> • Clinical Indications for MR-guided Radiotherapy treatment <i>by C. Gani</i> – 28'54" 	
	RTT	<ul style="list-style-type: none"> • Management of breathing motion in MR-guided RT <i>by S. Klüter</i> – 1h02'03" • Patient Positioning: Brain, Head and Neck, Thorax, Upper Abdomen and Pelvis <i>by H. McNair</i> – 27' 	
		CLINICAL CASE DISCUSSIONS	

4 – TUESDAY 26 OCTOBER

Time CET	Track	Webinar topic	Faculty
14:00-15:00		Q&A session per discipline - RO / clinical - all students welcome to join	
	RO/RTT	<ul style="list-style-type: none"> Immobilization devices and MR simulation in MR-guided RT by H. McNair – 18' 	S. Mook C. Gani
	RO/RTT	<ul style="list-style-type: none"> Decision Making: when do adapt a treatment fraction? by S. Mook – 35' 	V. Valentini U. van der Heide
	RO	<ul style="list-style-type: none"> Patient selection criteria and compliance assessment by S. Mook – 28' 	
	RO	<ul style="list-style-type: none"> Quantitative and functional imaging during MRI-guided Radiotherapy by U. van der Heide – 41' 	

5 – WEDNESDAY 27 OCTOBER

Time CET	Track	Webinar topic	Faculty
14:00-15:00		Q&A session per discipline - RTT - all students welcome to join	
	RO/RTT	<ul style="list-style-type: none"> Immobilization devices and MR simulation in MR-guided RT by H. McNair – 18' 	L. Boldrini F. Mahmood
	RO/RTT	<ul style="list-style-type: none"> Decision Making: when do adapt a treatment fraction? by S. Mook – 35' 	H. McNair S. Mook
	RTT	<ul style="list-style-type: none"> Quantitative and functional imaging during MRI-guided Radiotherapy by U. van der Heide – 41' 	
	RTT	<ul style="list-style-type: none"> Practicalities for patient management and workflow by H. McNair – 27' 	
	RTT	<ul style="list-style-type: none"> Basic principles of OARs contouring on MR by L. Boldrini – 22' 	

6 – THURSDAY 28 OCTOBER

Time CET	Track	Webinar topic	Faculty
14:00-15:00		Q&A session per discipline - MP - all students welcome to join	
	MP	<ul style="list-style-type: none"> Dosimetry in the presence of magnetic fields by S. Klüter – 30' 	S. Klüter F. Mahmood
	MP	<ul style="list-style-type: none"> Quantitative and functional imaging during MRI-guided Radiotherapy by U. van der Heide – 45' 	U. van der Heide
	MP	<ul style="list-style-type: none"> Artifacts in MRI: physical point of view by F. Mahmood – 49' 	

7 – WEDNESDAY 3 NOVEMBER

Time CET	Track	Webinar topic	Faculty
17:00-18:00	ALL	Q&A session about the following topics/pre-recorded lectures: <ul style="list-style-type: none">• Online adaptive radiotherapy: workflow and criticalities <i>by S. Mook - 33'</i>• RT and MR safety <i>by F. Mahmood - 41'</i>• In-room MR image processing and planning <i>by U. van der Heide - 30'</i>	S. Mook V. Valentini U. van der Heide

BETWEEN 3 & 7 NOVEMBER – students are requested to take out the MCQ test in ESTRO Moodle for a second time

8 – TUESDAY 9 NOVEMBER

Time CET	Webinar topic	Faculty
14:00-16:00	Recap session, discuss MCQs and official closure of the course	Course directors and full faculty
16:00-16:30	Demo presentation by Elekta	
16:30-17:00	Demo presentation by ViewRay	