



PROGRAM

Virtual Satellite Symposium:

Dosimetry and QA in MR-guided Radiotherapy-from
primary standards to clinical solutions

April 18th 2021

www.dkfz.de/mrinrthd2021



HOST:

dkfz.

GERMAN
CANCER RESEARCH CENTER
IN THE HELMHOLTZ ASSOCIATION

.....
Research for a Life without Cancer

PARTNERS:

HIRO

Heidelberg Institute
for Radiation Oncology



**HEIDELBERG
UNIVERSITY
HOSPITAL**

VIRTUAL SATELLITE SYMPOSIUM
DOSIMETRY AND QA IN MR GUIDED RADIOTHERAPY:
FROM PRIMARY STANDARDS TO CLINICAL SOLUTIONS

APRIL 18TH 2021

Scientific committee: Christian Karger, Sebastian Klüter, Stefan Dorsch

Program

All times indicated are given as **Central European Summer Time (CEST)**.

Time	Topic
8:30-8:50	Welcome Lounge
8:50-9:00	Welcome words by the organizers
9:00-10:35	Session A01: Dosimetry in magnetic fields – connection to primary standards Chair: Christian Karger/Ralf-Peter Kapsch
15+1 min 9:00-9:16	A01.01: ID 147: Water calorimetry at the Elekta MR-Linac to determine $k_{Q,B}$ <i>Leon de Prez (VSL, Delft, Netherlands)</i>
15+1 min 9:16-9:32	A01.02: ID 130: Water calorimetry at the ViewRay MR-Linac to determine $k_{Q,B}$ <i>Achim Krauss (PTB, Braunschweig, Germany)</i>
15+1 min 9:32-9:48	A01.03: ID 134: Monte Carlo for simulation of $k_{Q,B}$ of ion chambers: how to setup the system? <i>Ilias Billas (NPL, London, Great Britain)</i>
15+1 min 9:48-10:04	A01.04: ID 132: $k_{Q,B}$ correction factors for ion chambers and the role of dead volumes <i>Stefan Pojtinger (PTB, Braunschweig, Germany)</i>
15+1 min 10:04-10:20	A01.05: ID 148: Protocols for dosimetry in magnetic fields <i>Simon Woodings (UMC, Utrecht, Netherlands)</i>
10:20-10:35	Discussion
10:35-11:10	Coffee break
11:10-12:30	Session A02: Installation and Clinical commissioning of MR-Linac devices Chair: Sebastian Klüter/Simeon Nill
15+1 min 11:10-11:26	A02.01: ID 140: From Installation to first patient treatments with the ViewRay system <i>Anil Sethi (Loyola University, Chicago, USA)</i>
15+1 min 11:26-11:42	A02.02: ID 138: From Installation to first patient treatments with the Elekta system <i>Marcel Nachbar (University Hospital Tübingen, Germany)</i>
15+1 min 11:42-11:58	A02.03: ID 144: The MagnetTx AuroraRT system: How to arrive at the first patient treatment? <i>Gino Fallone (CCI, Edmonton, Canada)</i>
15+1 min 11:58-12:14	A02.04: ID 149: The Australian MRI-Linac system: How to arrive at the first patient treatment? <i>Paul Keall (ACRF Image X Institute, Sydney, Australia)</i>
12:14-12:30	Discussion
12:30-13:30	Lunch Break

Organizer:

Partners:

VIRTUAL SATELLITE SYMPOSIUM
DOSIMETRY AND QA IN MR GUIDED RADIOTHERAPY:
FROM PRIMARY STANDARDS TO CLINICAL SOLUTIONS

APRIL 18TH 2021

13:30-14:50	Session A03: New procedures for regular machine QA Chair: Daniela Thorwarth/Davide Cusumano
15+1 min 13:30-13:46	A03.01: ID 150: Special requirements for measurement equipment in MRgRT <i>Jochem Wolthaus (UMC, Utrecht, Netherlands)</i>
15+1 min 13:46-14:02	A03.02: ID 135: Isocenter accuracy and image distortion measurements at MR-Linacs <i>Stefan Dorsch (DKFZ, Heidelberg, Germany)</i>
15+1 min 14:02-14:18	A03.03: ID 136: MRI quality control for MRgRT-systems <i>Andreas Wetscherek (ICR / RMH, London, Great Britain)</i>
15+1 min 14:18-14:34	A03.04: ID 153: QA for MR-guided gating <i>Taeho Kim (Washington University School of Medicine)</i>
14:34-14:50	Discussion
14:50-15:20	Coffee break
15:20-16:55	Session A04: Verifying the adaptive process & online QA Chair: Stefan Dorsch/Jochem Wolthaus
15+1 min 15:20-15:36	A04.01: ID 131: End-to-end-Tests for adaptive MRgRT <i>Alina Elter (DKFZ, Heidelberg, Germany)</i>
15+1 min 15:36-15:52	A04.02: ID 129: Failure mode and effect analysis in MRgRT <i>Oliver Schrenk (PTW Freiburg)</i>
15+1 min 15:52-16:08	A04.03: ID 143: Online-QA in the adaptive process with the ViewRay system <i>Stephanie Tanadini-Lang (University Hospital Zürich, Switzerland)</i>
15+1 min 16:08-16:24	A04.04: ID 128: Online-QA in the adaptive process with the Elekta system <i>Simeon Nill (ICR / RMH, London, Great Britain)</i>
15+1 min 16:24-16:40	A04.05: ID 137: Dose reconstruction using linac log files and online MRI: a promising tool for daily patient QA? <i>Martin Menten (Imperial College London, Great Britain)</i>
16.40-16:55	Discussion
5 min 16:55-17:00	Closing Christian Karger, Sebastian Klüter, Stefan Dorsch

All times indicated are given as **Central European Summer Time (CEST)**.

Organizer:

Partners: