# PLACE OF EVENT / DIRECTIONS





# **ORGANISATION DETAILS**

#### Contact:

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#### Certification:

Accredited at the state medical association Baden-Württemberg with five continuous medical education training credits.

For support we thank the following sponsors:

OPASCA GmbH, Mannheim



750.00 €

Carl Zeiss Meditec AG, Oberkochen



750,00 €

ELEKTA GmbH, Hamburg



1.000,00€

Admission is free: We ask for a brief informal registration via E-mail.

# INVITATION

#### DEPARTMENT

**OF** 

### RADIATION ONCOLOGY

Universitätsmedizin Mannheim Medical Faculty Mannheim Heidelberg University

14<sup>th</sup> Summer Workshop

Image Guided and Robotic Radiotherapy Saturday, 02. September 2017 9:00 – 14:00

Alte Brauerei, Röntgenstrasse 7 Lecture Room H02, EG 68167 Mannheim

opposite to University Medical Centre Mannheim





# **PREAMBLE**

Dear Colleagues,

We would like to invite you to our 14th Summer Workshop on Image Guided and Robotic Radiotherapy.

In this year, we divide the workshop in two sessions, robotics and image guidance.

After a short overview of how robotics helped so far in treating tumors, recent results and developments in this field such as robotics in urology, brachytherapy under MRI control, and electronic brachytherapy for glioblastoma treatment are presented.

In the second session, image guidance and aspects that relate to the medical physics issues are the main focus. We have hereby selected a set of interesting questions from dosimetry. planning to digital health (UMM 4.0).

The symposium and the workshop address physicians, physicists in radiation oncology and neighbouring disciplines as well as students in medical physics or biomedical engineering. Certification will be requested from the Landesärztekammer.

It is a pleasure for us to welcome you in Mannheim.

Prof. Dr. F. Wenz Dr. F. Giordano

Prof. Dr. J. W. Hesser Dr. M. Blessing

# AGENDA

Lecture times include 3 min discussion!

08:30 09:00	Registration Welcome	F. Wenz
	Session 1 (Robotics) Moderation	M. Blessing
09:05	17 Years of Intraoperative Ra Robotics Taking Over	diotherapy: F. Wenz
09:25	"MRI-guided Interventions"	U. Attenberger
09:45	Robotic Surgery in Urology	M. Ritter
10:05	Intraoperative Radiotherapy i	n Glioblastoma F. Giordano
10:25-1	0:50 Coffee Break	
	Session 2 (Image-Guidance Moderation	) F. Giordano

10:50 Small/large field dosimetry and verification for Single-isocenter multiple-lesion treatments P. Zygmanski

11:10 The effect of clustering on the dose distribution about gold nanoparticles E. Sajo

11:30 Multifunctional Image-guided Radiotherapy Biomaterials W. Ngwa

11:50 Biological optimization of intensity modulated proton therapy D. Giantsoudi

12:10 Imaging for Treatment Planning in Molecular Radiotherapy G. Glatting

12:30 UMM 4.0 – Health IT from paper to tablet and from proprietary to open standards

L. Jahnke 12:50 Conclusion F. Wenz

13:00 Ceremony, Award of master Certification "Medical Physics" and "Biomedical Engineering"

#### 13:20 Lunch and Poster Session

# **MODERATORS & SPEAKERS**

Prof. Dr. Frederik Wenz Dept. of Radiation Oncology University Medical Centre Mannheim

Dr. Frank Giordano Dept. of Radiation Oncology University Medical Centre Mannheim

Dr. Lennart Jahnke CIO, University Medical Centre Mannheim

Dr. Manuel Blessing **Experimental Radiation Oncology** University Medical Centre Mannheim

Prof. Dr. Jürgen Hesser Experimental Radiation Oncology University Medical Centre Mannheim

Dr. Ulrike Attenberger Institute for Radiology and Nuclear Medicine University Medical Centre Mannheim

Prof. Dr. Gerhard Glatting Medical Radiation Physics, Department of Nuclear Medicine Ulm University, Germany

Prof. Dr. Erno Saio Dept. of Physics and Applied Physics University of Massachusetts Lowell, USA

University of Massachusetts Lowell, USA

Prof. Dr. Piotr Zygmanski Harvard Medical School and Brigham & Women's Hospital Dana Farber Cancer Institute, Boston, MA, USA

Harvard Medical School and Brigham & Women's Hospital Dana Faber Cancer Institute, Boston, MA, USA Dept. of Physics and Applied Physics

Dr. Drosoula Giantsoudi Harvard Medical School and Massachusetts General Hospital

Prof. Dr. Manuel Ritter **Urological Clinic** University Medical Centre Mannheim

**Boston**