

- **Lorenzo Placidi, Ph.D.** · Head of MRI-Linac medical physics group, Gemelli University Hospital Foundation IRCCS, Rome
- **PD Dr. Florian Putz** · Consultant, Dep. of Radiation Oncology, University Clinic Erlangen
- **Prof. Jan-Jakob Sonke, Ph.D.** · Theme leader Image Guided Therapy, The Netherlands Cancer Institute (NKI), Amsterdam
- **Prof. Dr. Kristian Unger** · Head of AI-assisted treatment decisions in personalized oncology, Dept. of Radiation Oncology, LMU University Hospital, Munich
- **Dr. Niklas Wahl** · Research group leader Radiotherapy Optimization, German Cancer Research Center (DKFZ), Heidelberg

Chair

Prof. Dr. Claus Belka

Organizing committee

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We applied for CME credits by Bayerische Landesärztekammer.

Venue

St. Vinzenz Haus
Nußbaumstraße 5
80336 München
Germany



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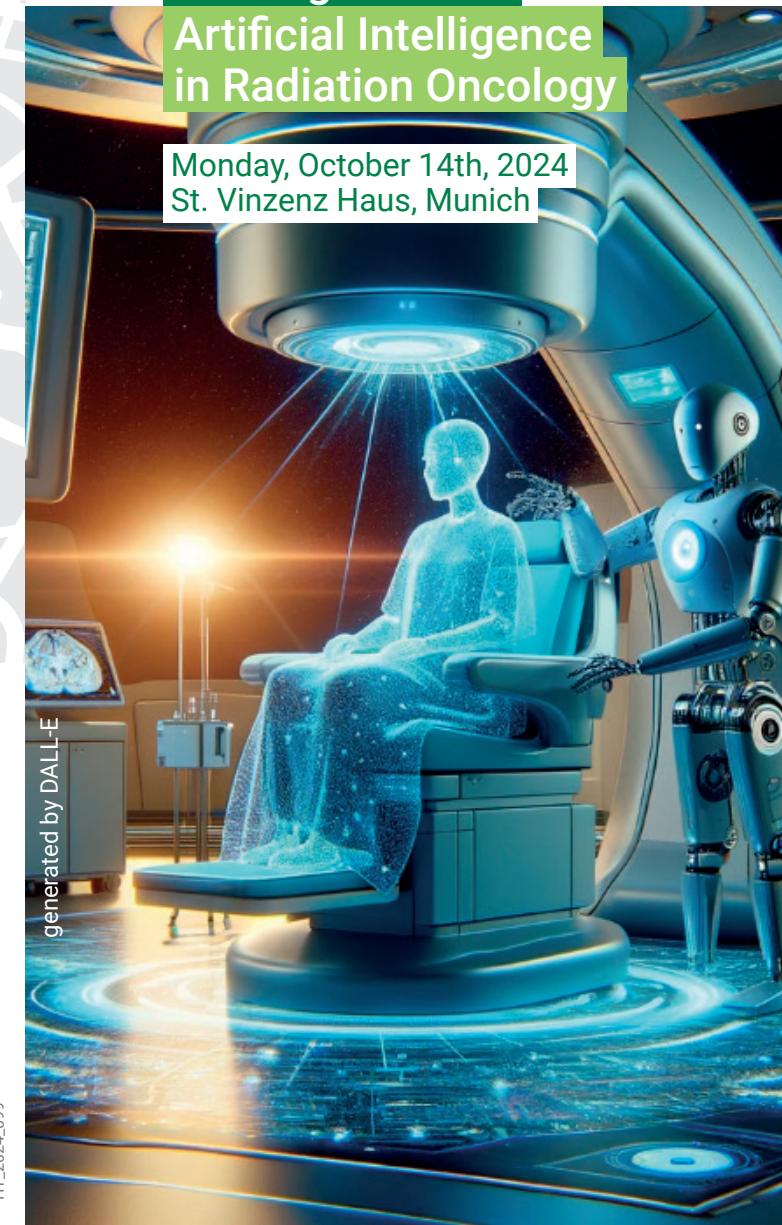
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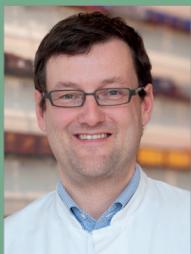
1,000 EUR each



XChange 2024 – Artificial Intelligence in Radiation Oncology

Monday, October 14th, 2024
St. Vinzenz Haus, Munich





Dear colleagues,

I am delighted to extend a warm invitation to the third edition of the XChange symposium, a forum dedicated to exploring the latest advancements and innovations in radiation therapy. Our previous gatherings have served as catalysts for insightful discussions and fruitful collaborations, and I am confident that this year's symposium will be no exception.

With AI-driven algorithms revolutionizing treatment planning, delivery, and monitoring, we stand at the forefront of a new era in cancer treatment, so this year XChange will focus on artificial intelligence in radiation therapy.

We were able to attract an illustrious interdisciplinary panel of speakers, esteemed experts in the field of radiation oncology and artificial intelligence who will share their insights, experiences, and visions for the future. We will also hear from experts from other medical fields relevant for radiation therapy, and as a special the symposium will be accompanied by an exhibition where the artist used artificial intelligence tools in the creative process.

I eagerly anticipate our gathering in Munich, where we will engage in stimulating discussions, forge new connections, and chart the course for the future of artificial intelligence in radiation therapy.

With warm regards,

Prof. Dr. med. Claus Belka

Program

09:00	Reception	
09:30	Welcome, Introduction	Claus Belka
09:45	<i>Chair: Claus Belka</i>	
	Opening Keynote	Anna Kirby
	Structured reporting and target definition with AI	Clemens Cyran
	AI guided pathology	Frederick Klauschen
	The artistic process and AI	Tanja Hirschfeld
11:00	Coffee break	
11:30	<i>Chair: Katia Parodi</i>	
	AI in surgery	Wolfgang Böcker
	Online adaptive RT aided by AI	Tobias Finazzi
	AI for motion management	Jennifer Dhont
	AI in clinical decision making	Kristian Unger
13:00	Lunch break	
14:00	<i>Chair: Guillaume Landry</i>	
	Delta radiomics and dose tailoring	Luca Boldrini
	Ethics aspects of medical AI	Sven Nyholm
	AI tumor segmentation	Florian Putz
15:00	Coffee break	
15:20	<i>Chair: Kristian Unger</i>	
	AI-powered precision radiotherapy	Nikos Paragios
	Radiomics as an AI tool for risk stratification	Jan Peeken
	Patient specific AI delineation methods	Christopher Kurz
	AI-based dose calculation	Niklas Wahl
16:45	Coffee break	
17:10	<i>Chair: Stefanie Corradini</i>	
	AI in image reconstruction	Jan-Jakob Sonke
	Reliable AI in Medicine	Gitta Kutyniok
	Dosimomics	Lorenzo Placidi
18:15	End of Symposium	
20:00	Dinner at Ratskeller, Marienplatz 8	

Speakers and Chairs

- Prof. Dr. Claus Belka · Head, Dept. of Radiation Oncology, LMU University Hospital, Munich
- Prof. Dr. Wolfgang Böcker · Head, Dept. of Orthopaedics and Trauma Surgery, LMU University Hospital, Munich Director, Musculoskeletal University Center Munich
- Prof. Dr. Luca Boldrini · Medical Director, COU Cancer Radiation Therapy, Agostino Gemelli University Hospital Foundation IRCCS, Rome
- Prof. Dr. Stefanie Corradini, Vice Chair, Dept. of Radiation Oncology
- Prof. Dr. Clemens Cyran · Managing Consultant, Dept. of Radiology, LMU University Hospital, Munich
- Jennifer Dhont, Ph.D. · Data Scientist, Institut Jules Bordet, Brussels
- PD Dr. Tobias Finazzi · Senior Consultant, Department of Radiation Oncology, Cantonal Hospital Baden
- Tanja Hirschfeld · Contemporary Artist based in Munich
- Anna Kirby, M.D. · Consultant Clinical Oncologist, The Royal Marsden Hospital and ICR, London
- Prof. Dr. Frederick Klauschen · Head, Inst. of Pathology, LMU University Hospital, Munich
- PD Dr. Christopher Kurz · Research group leader MR-guided radiotherapy, Dept. of Radiation Oncology, LMU University Hospital, Munich
- Prof. Dr. Gitta Kutyniok · Bavarian AI Chair for Mathematical Foundations of Artificial Intelligence, LMU Munich
- Prof. Dr. Guillaume Landry · Head of Physics Research, Dept. of Radiation Oncology, LMU University Hospital, Munich
- Prof. Dr. Sven Nyholm · Head, Dept. of Ethics of Artificial Intelligence, LMU Munich
- Prof. Dr. Nikos Paragios · Distinguished Professor of Mathematics at Université Paris-Saclay and CEO at TheraPanacea
- Prof. Dr. Katia Parodi, Head, Dept. of Medical Physics, LMU University, Munich
- PD Dr. Jan Peeken · Managing Consultant, Dep. of Radiation Oncology, TU Munich, and Group leader Artificial Intelligence and Radiomics in Radiation Oncology, Helmholtzzentrum München