

Artificial Intelligence in the field of Medical Physics

28th September 2022
Continuous Education day

Venue

Room Grosser Saal 016
School building (ground floor)
Lindenhof Hospital
Bremgartenstrasse 117, 3001 Bern

Event limited to **80** participants

*6 points of continuous education
will be awarded to the participants*



LINDENHOFGRUPPE



Program

Getting Started

08:30 Arrival and registration

09:00 Welcome address

*Michael Fix (President SSRMP),
Organizing committee:*

*Stefano Gianolini, Stephan Klöck, Silvan Müller,
Maria Antonietta Piliero, Bertrand Pouymayou, Michele Zeverino*

Introduction lectures (Chair: Michele Zeverino)

09:15 General introduction to AI in medical physics

Gilmer Valdes, San Francisco University

09:40 Challenges and pitfalls of applied AI

Olga Levina, Brandenburg University

10:05 Evaluation of commercial AI solutions in radiology
(the ÉCLAIR guidelines)

Jonas Richiardi, Lausanne University Hospital

10:30 Coffee break (Konferenzraum 015)

Companies presentations (Chair: Silvan Müller)

11:00 MVision's AI powered guidelines-driven
segmentation solution

Rolf Staehelin, MedTech

11:20 Artificial intelligence in clinical practice

Micheal Duchateau, MIM software

11:40 Clinical implementation feasibility of AI-enhanced contouring

Ivo Driesser, Siemens Healthineers

12:00 AI solution in radiology - from prototype to FDA clearance

Stefan Voser, ScanDiags AG

12:20 Lunch (Konferenzraum 015)

Applied AI in Medical Physics - Radiation Therapy

(Chair: Silvan Müller)

13:30 Auto-segmentation of brain structures: Validation metrics &
quality assurance

Robert Poel, Bern University Hospital

13:45 Breast autoplanning clinical implementation in Raystation

Michele Zeverino, Lausanne University Hospital

14:00 AI for patient-specific QA

Gilmer Valdes, San Francisco University

14:15 Coffee break (Konferenzraum 015)

Applied AI in Medical Physics - Imaging

(Chair: Bertrand Pouymayou)

14:45 Using AI for a model-based optimization of the target
volume in the case of glioma

Bjoern Menze, Zurich University

15:00 Synthetic CT for MRgRT

Riccardo Dal Bello, Zurich University

15:15 Automatic detection of aneurysms on IRM-based images

Jonas Richiardi, Lausanne University Hospital

15:30 Radiomics for clinical outcome modeling

Hubert Gabrys, Zurich University

Wrap-up (Chair: Stephan Klöck)

16:00 Discussion:

Starting with AI: considerations and questions to ask

*Gilmer Valdes, Olga Levina, Jonas Richiardi, Bjoern
Menze*

16:45 Closing

Organizing committee

Directions

General information

Lindenhof Hospital is situated at the north-eastern edge of the city of Berne close to the motorway junctions Neufeld and Forsthaus. Five Post-Auto and two bus routes run regularly from the station and stop a few hundred metres from our main building.

All buildings in the hospital area are linked underground so that you can reach all buildings protected from the weather.



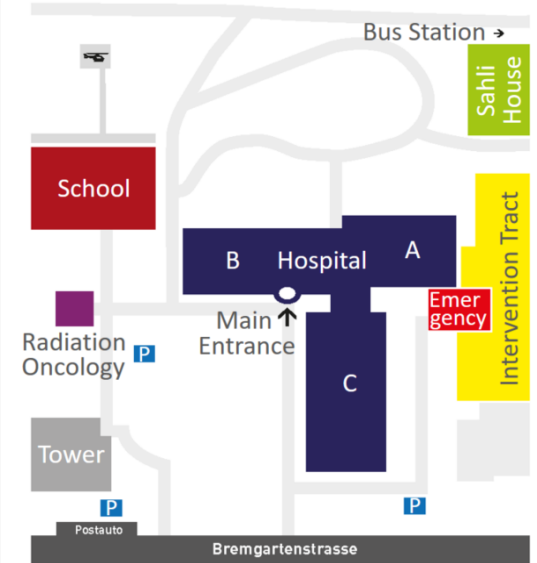
Parking

In front of Lindenhof Hospital you will find a limited number of paid parking places. These are intended for visitors and patients. However, there is no special entitlement for anyone to park there. Other parking places exist in the high school grounds next door in Bremgartenstrasse and in the Parkhaus Neufeld.

Bus

- Post-Auto lines 102, 103, 104, 105, 106 (bus stop Lindenhofspital)
- Bus 20 (Terminus Länggasse)
- Bus 11 (Terminus Park+Ride Neufeld).

Area Map Lindenhof Hospital



Lindenhof

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