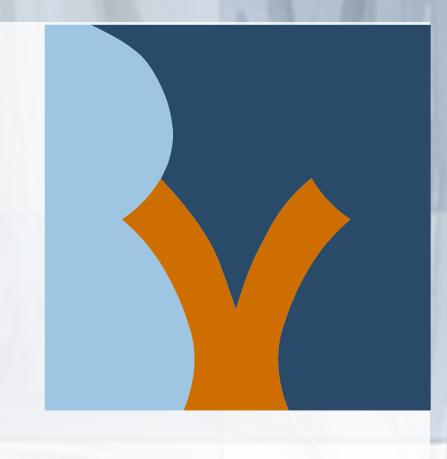


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# REGENSBURG





## German Conference on Medical Image Computing

Bildverarbeitung für die Medizin

## March 9-11, 2025 Regensburg

#### Organiser

Regensburg Medical Image Computing (ReMIC) OTH Regensburg (Technical University of Applied Sciences)

#### supported by

Regensburg Center for Artificial Intelligence (RCAI) Regensburg Center of Biomedical Engineering (RCBE) Regensburg Center of Health Sciences and Technology (RCHST)

## Call for Papers

in conjunction with the

MedVis & BioVis Workshop on March 12-13, 2025

of the Visual Computing in Biology and Medicine specialist group of the Gesellschaft für Informatik

Submission deadline

October 25, 2024





















Conference chair

Prof. Dr. rer. nat. Christoph Palm Regensburg Medical Image Computing (ReMIC)

OTH Regensburg

christoph.palm@oth-regensburg.de

Conference office

Sümeyye Yildiran OTH Regensburg

orga-2025@bvm-conf.org

#### Contributions

There are two submission formats:

- Original papers
- **Abstracts**

Original papers: Papers up to six pages can be submitted. Accepted contributions will be published as long versions in the conference proceedings of the Informatik Aktuell series by Springer Verlag, Berlin. The presentation can take the form of a lecture or a poster.

Abstracts: The abstract format comprises one page and allows the submission of interesting contributions that have already been published elsewhere or accepted for publication. Abstracts will appear in the conference proceedings with title, authors and abstract only. The presentation can take the form of a lecture or poster. Submission and format templates are available at www.bvm-conf.org

All original papers are evaluated by three independent reviewers from the programme committee.

### Special Issue

It is planned to publish outstanding scientific contributions from BVM 2025 in a special issue of a renowned international journal. In each of the last three years, a special issue has been published in the International Journal of Computer Assisted Radiology and Surgery (IJCARS, IP: 3.0).

#### Awards and Awards are given for honours

- Best contribution (3 awards, original papers only)
- Pitt-Meinzer-Vortragspreis (best lecture)
- Best poster or software demonstration

In a further application process, the BVM Award will be announced for the best final thesis in the field of medical image processing (Bachelor, Master, PhD, Habil). The BVM Award 2025 is endowed with 2,000€, sponsored by the company Nexus/Chili.

### Presentation types

09.-11.03.2025

12.-13.03.2025

Orals: Current research results are presented and discussed in scientific lectures (12 minutes + 3 minutes discussion). Optionally, we are happy if a poster is also created for the oral content in order to promote the 1 on 1 discussion.

Poster and software demonstrations: The poster presentation (A0, portrait format) preceded by a teaser enables intensive discussions and personal contact. Software and system demonstrations showing hands-on systems are particularly welcome. The presentations are integrated into the poster sessions.

#### Submission deadline for long papers/abstracts 25.10.2024 Dates Notification of authors 29.11.2024 Submission deadline for print-ready long papers/abstracts 05.01.2025 Submission deadline for BVM-Award applications 31.01.2025 End of the reduced conference fees 31.01.2025 Tutorials 09.03.2025 09.03.2025 Conference Opening Reception

Conference

MedVis&BioVis Workshop

#### Tutorials

Several tutorials are planned for Sunday afternoon:

- Quantum Computing
   OTH Regensburg
- Kaapana Demo HandsOn DKFZ Heidelberg
- Implicit Neural Representations
  Universität zu Lübeck

#### Keynotes

We are happy to announce three keynotes:

- Ivana Išgum, Amsterdam University Medical Centers, NL
- Dave Hawkes, University College London, GB
- Dirk Wilhelm, Technische Universität München, D

#### Industry

The conference is co-financed by industrial sponsorship. An industry exhibition and job fair will be held in the foyer of the lecture hall building at the Forum. If you are interested, please contact the conference office.

#### **BVM Committee**

#### Supraregional organisation:

Thomas Deserno

Heinz Handels

Andreas Maier

Klaus Maier-Hein

TU Braunschweig

Universität zu Lübeck

FAU Erlangen-Nürnberg

DKFZ Heidelberg

Klaus Maier-Hein DKFZ Heidelberg Christoph Palm OTH Regensburg

Thomas Tolxdorff Charité - Universitätsmedizin Berlin

#### Local Orga

OTH Regensburg, ReMIC Laboratory: Christoph Palm, Sümeyye Yildiran, Leonard Klausmann, Alexander Leis, David Rauber, and more

## Conference venue

#### **OTH Regensburg**

Conference: Lecture hallbuilding at the Forum, Galgenbergstr. 30,

93053 Regensburg

Tutorials and Reception: Building K, Faculty of Computer Science and

Mathematics, Galgenbergstr. 32, 93053 Regensburg

### Organiser

Regensburg Medical Image Computing (ReMIC)

OTH Regensburg (Technical University of Applied Sciences)

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Regensburg Center for Artificial Intelligence (RCAI) Regensburg Center of Biomedical Engineering (RCBE)

Regensburg Center of Health Sciences and Technology (RCHST)

and supporting professional associations.

## Reception

This time, BVM will officially start on Sunday evening with the **conference opening reception** with snacks and drinks and the opportunity for first discussions.

### Activities

In addition, there will be a number of BVM-related activities that are optionally open to all participants:

- City tour (with registration, small contribution towards costs)
- Running Events (without registration, free of charge)
- Guided tours of the OTH research facilities

Conference fees	Early bird until 31.01.2025	Regular from 31.01.2025
Students (Bachelor/Master) Members of supporting professional associations Regular participants Tutorial Conference Opening Reception	45€ 190€ 215€ 60€ free	65€ 230€ 255€ 80€ free
Social evening (regular / students)	35€ / 20€	45€ / 25€
MedVis & BioVis Workshop	free	free

#### Aims of BVM

Medical image computing is the key technology for modern image-based diagnostics and surgical support. The German-speaking community have been meeting at the BVM conference (German conference on Medical Image Computing, Bildverarbeitung für die Medizin) since 1993.

The aim of the conference is to present current research results and to deepen discussions between representatives of the medical, computer and technical sciences, industry and clinical application. The conference is also explicitly aimed at young scientists who wish to report on their Bachelor's or Master's projects. Contributions from European colleagues are also welcome. Although English and German are equal congress languages, English has largely prevailed in the lectures and poster presentations.

### Topics

Artificial intelligence and machine learning play a particularly important role. Nevertheless, the topics of the conference cover all areas of medical image processing, in particular algorithms, hardware and software systems and their clinical application:

- Machine learning and artificial intelligence
- Convolutional Neural Networks and Deep Learning
- Generative Models and Transformer Networks
- Imaging and image acquisition, e.g. MRT, CT, ...
- Visible light, endoscopy, microscopy
- Image segmentation and image analysis
- Image registration and fusion
- Visualisation and animation
- Anatomical atlases
- Time series analysis
- Secure exchange of medical image data
- Patient-specific simulation and planning
- Computer-aided diagnosis
- Virtual / Augmented Reality
- VR simulators and haptic 3D interaction
- Biomechanical modeling
- Computer-assisted intervention
- Instrument and patient localisation and tracking
- Computer-aided operation planning
- Clinical application of computer-aided systems
- Validation and quality assurance
- Image-supported robots, surgical simulators
- Free topics

## Website and Social Media

All information and the possibility to register at: www.bvm-conf.org

You can also follow the LinkedIn account **BVM - German Conference on Medical Image Computing**and the X account

@BVM\_Conf

### Supporting professional associations

- Berufsverband Medizinischer Informatiker e.V. (BVMI)
- Deutsche Gesellschaft für Computer- und Roboterassistierte Chirurgie (CURAC)
- Deutsche Arbeitsgemeinschaft für Mustererkennung e.V. (DAGM)
- Fachgruppe Medizininische Informatik der Deutschen Gesellschaft für Biomedizinische Technik (DGBMT) im Verband Deutscher Elektrotechniker (VDE)
- AG Medizinische Bild- und Signalverarbeitung der Gesellschaft für Medizinische Informatik, Biometrie und Epidemiologie (**GMDS**) und der Gesellschaft für Informaik (**GI**)
- IEEE Joint Chapter Engineering in Medicine and Biology, German Section

#### Program committee

FH Flensburg Marc Aubreville FAU Erlangen-Nürnberg Katharina Breininger TU Braunschweig Thomas Deserno Jan Ehrhardt Universität zu Lübeck Sandy Engelhardt Universitätsklinikum Heidelberg Ralf Floca DKFZ Heidelberg Nils Forkert University of Calgary, Canada Jürgen Frikel OTH Regensburg Universitätsklinik Ulm Michael Götz Horst Hahn Fraunhofer MEVIS, Bremen Heinz Handels Universität zu Lübeck Tobias Heimann Siemens Healthcare GmbH, Erlangen Universität zu Lübeck Mattias Heinrich Charité - Universitätsmedizin Berlin Anja Hennemuth Alexander Horsch The Arctic University of Norway, Tromsø Brinesh Jain OTH Regensburg MDC Berlin Dagmar Kainmüller Bernhard Kainz FAU Erlangen-Nürnberg Harvard Medical School, USA Ron Kikinis FAU Erlangen-Nürnberg Andreas Kist Universitätsmedizin Göttingen Dagmar Krefting Andreas Maier FAU Erlangen-Nürnberg

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 Thomas Wittenberg Fraunhofer IIS Erlangen Ivo Wolf Hochschule Mannheim

**VCBM** 

The MedVis & BioVis-Workshop of the Visual Computing in Biology and Medicine specialist group of the GI will be held directly after the BVM on March 12-13, 2025 at the conference venue in Regensburg.

Welcome to Regensburg

