



University
of Basel

Department of
Biomedical Engineering



Seminar Series:

Latest Breakthroughs in Biomedical Engineering Research

Location: DBE Science Lounge, Hegenheimermattweg 167C, 4123 Allschwil

Date & Time: Thursday 07.11.2024 | 15:30 – 16:30

Host: Prof. Georg Rauter

Navigating Tomorrow: Revolutionary Frontiers in Endovascular Surgery

Dr.-Ing. Dennis Kundrat

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Abstract

This talk will explore groundbreaking advancements for the future of endovascular surgery. Innovative technologies, including AI-driven MR-compatible robotics and enhanced imaging techniques, are set to transform surgical practices and improve patient outcomes. Pioneering data-driven skill assessment technologies will transform endovascular training and the design of autonomous devices.

Biosketch

Dennis leads the Therapy Department at the Fraunhofer IMTE, focusing on pioneering assistive mechatronic technologies, surgical training technologies and surgical robotics. With a rich background in medical robotics across esteemed institutions, his innovative research has led to several awards, including the Best Robotic Design Award at the UK-RAS Surgical Robot Challenge. Passionate about enhancing patient care, he strives to develop individualized mechatronic platforms that integrate robotics and AI for improved clinical outcomes.