

PHYSIKALISCHES KOLLOQUIUM

AM 20. OKTOBER 2025 UM 16 UHR C.T.
IM GROßEN HÖRSAAL



THE FUTURE OF MAGNETIC RESONANCE IMAGING: CAN WE LEARN FROM THE PAST?

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Magnetic resonance imaging (MRI) has come a long way since the first conception of making an image by Nuclear Magnetic Resonance by P. Lauterbur in 1973. The first clinical MRI scanners came to the market in the early 1980s and since then there was continuous and vibrant research leading to the current state of sophistication. MRI has the unique characteristic that practically all relevant measurement techniques in use today have come from academic research, the role of industry was mainly the development of hardware – magnets with higher and higher field strength and gradient systems outperforming early systems by more than a factor of 100. After the long development one would expect some degree of maturation of the technology, which is true to some extent, on the other hand new technologies are becoming available – both with respect to hardware as well as software – which open up new opportunities way beyond the current state-of-the-art.

The presentation will take look back to the early days of MRI in order to give some context on where the field is today and where it may be heading to.

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