

**Light in the dark,
Neutrons for Science, Engineering and Medicine**

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Neutrons easily penetrate all kind of matter, tell in a unique way where the atoms are, how they move and reveal the origin of magnetism. Also neutrons perform nuclear reactions and transmute elements.

With the neutron source Heinz Maier-Leibnitz (FRM II) the Technische Universität München provides intense neutron beams ranging from ultra-cold to fast neutrons for the purposes of fundamental sciences, material sciences, engineering and medicine.

After a short introduction how to provide brilliant neutron beams over a huge range of wavelength selected examples will be given how research at neutron beams addresses the grand challenges of today society: energy transformation, -transport and –storage, information technology, mobility, health and last not least curiosity or fundamental science.