

MA 23 Invited Talk Schilling

Time: Thursday 09:30–10:00

Room: HSZ 03

Invited Talk

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Proteins and patients - new applications of low noise magnetic field sensors — •MEINHARD SCHILLING — TU Braunschweig, Institut für Elektrische Messtechnik und Grundlagen der Elektrotechnik, Hans-Sommer-Str. 66, 38106 Braunschweig

For many years biomagnetism has been a motor of progress in the development of low-noise magnetic field sensors, like superconducting quantum interferometers working at low temperature. In recent years also room temperature magnetic sensors like fluxgates have been improved considerably. Exciting new applications of these sensors in biotechnology, medical diagnosis and therapy are at hand in combination with magnetic nanoparticles, which are already used in the clinical routine. Also, new imaging techniques using low noise magnetic sensors like magnetic particle imaging and low-field magnetic resonance imaging will be addressed.