

Radiation and Medical Physics Division Fachverband Strahlen- und Medizinphysik (ST)

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This year the Meeting of the Division of Radiation and Medical Physics will take place from Monday morning until Thursday evening. The presentations and discussions will concentrate on the usual topics dealing with advances in radiation measurements and uses in research, medical diagnostics and therapy. This time we will also hear from first results regarding the medical use of anti protons in radiation therapy with their star forming disintegrations at their track ends.

Our Division meeting will also participate together with the Division of Chemical and Polymer Physics as well as with the Division of Magnetism in a Plenary Talk by the Swiss Nobel Laureate (1991) Richard Robert Ernst and in two high level symposia/sessions dealing with the exciting novel modalities and frontiers “NMR” and “Magnetism in Medicine”. This will encourage cross fertilization of students and scientists working in neighboring, but different fields of physics to the benefit of advances in their basic research and in numerous applications.

Overview of Symposia and Sessions

(lecture rooms H41; poster H41)

Invited talks of the joint symposium SYMR

See SYMR for the full program of the Symposium.

SYMR 4.1	Tue	9:30–10:00	H1	NMR with a Magnetic Resonance Force Microscope — ●BEAT H. MEIER, KAI EBERHARDT, JOSS ROSMARIE, TOMKA IVAN
SYMR 4.2	Tue	10:00–10:30	H1	Probing Novel Electronic States in Strongly Correlated Electron Materials Using NMR and NQR — ●NICHOLAS CURRO
SYMR 4.3	Tue	10:30–11:00	H1	Interplay of Structure and Dynamics in Macromolecular and Supramolecular Systems as Revealed by NMR Spectroscopy — ●HANS WOLFGANG SPIESS
SYMR 4.4	Tue	11:15–11:45	H1	Big times for small NMR — ●BERNHARD BLÜMICH
SYMR 4.5	Tue	11:45–12:15	H1	Traveling-Wave MRI — ●KLAAS PRÜSSMANN
SYMR 4.6	Tue	12:15–12:45	H1	Life on the Edge: The Origins and Proliferation of Protein Misfolding Diseases — ●CHRISTOPHER M. DOBSON

Invited talks of the joint symposium SYMM

See SYMM for the full program of the Symposium.

SYMM 1.1	Wed	9:30–10:00	H1	Magnetic resonance imaging: an ongoing success story — ●JENS FRAHM
SYMM 1.2	Wed	10:00–10:30	H1	Biomedical nanomagnetism: A spin through new possibilities — ●KANNAN KRISHNAN
SYMM 1.3	Wed	10:30–11:00	H1	Recent SQUID applications in medicine — ●HANS KOCH
SYMM 1.4	Wed	11:00–11:30	H1	Biomedical Magnetic Resonance using Hyperpolarized Gases and Liquids — ●LAURA SCHREIBER
SYMM 1.5	Wed	11:30–12:00	H1	Recent Developments in Healthcare Biomagnetics — ●QUENTIN PANKHURST

SYMM 1.6 Wed 12:00–12:30 H1 **SQUIDs for Noninvasive Magnetogastrography** — •ALAN BRADSHAW,
LEO CHENG, ANDREW PULLAN, WILLIAM RICHARDS

Sessions

ST 1.1–1.4	Mon	10:30–11:50	H41	Advances in Radiation Detectors 1
ST 2.1–2.3	Mon	13:30–14:30	H41	Advances in Radiation Detectors 2
ST 3.1–3.4	Mon	14:30–15:30	H41	Radiation Detectors and Imaging (Poster Session)
ST 4.1–4.3	Mon	16:00–17:00	H41	Radiation Imaging
ST 5.1–5.1	Tue	8:30– 9:15	H1	NMI and MRI: Basic Physics for the Sake of Society
ST 6.1–6.6	Tue	9:30–12:45	H1	SYMR (CPP and ST): Nuclear Magnetic Resonance: From Applications in Condensed Matter Physics to New Frontiers
ST 7.1–7.10	Tue	13:45–16:15	H48	Nuclear Magnetic Resonance: Frontiers and Applications (CPP and ST)
ST 8.1–8.6	Wed	9:30–12:30	H1	Magnetism and Medicine (MA and ST)
ST 9.1–9.4	Wed	14:00–15:20	H41	Ultrasound and MRT
ST 10.1–10.9	Wed	16:00–17:00	H41	Basic and Applied Medical Physics (Poster Session)
ST 11.1–11.3	Thu	9:30–10:30	H41	High-LET Radiation Therapy 1
ST 12.1–12.5	Thu	11:00–12:40	H41	High-LET Radiation Therapy 2
ST 13.1–13.2	Thu	14:00–14:40	H41	Low-LET Radiation Therapy
ST 14.1–14.2	Thu	14:45–15:15	H41	Radiation Physics (Poster Session)
ST 15.1–15.4	Thu	15:45–17:05	H41	Biokinetic Measurements and Models

Annual General Meeting of the Radiation and Medical Physics Division

Monday 17:00–18:00 H41

- Reports
- Results of Elections
- Future Meetings
- Varia