ST 5: NMI and MRI: Basic Physics for the Sake of Society

Time: Tuesday 8:30–9:15 Location: H1

Plenary Talk ST 5.1 Tue 8:30 H1 NMR and MRI: Basic Physics for the Sake of Society — • RICHARD R. ERNST — Laboratorium für Physikalische Chemie, ETH Zürich, Wolfgang-Pauli-Strasse 10, 8093 Zürich, Switzerland

Nuclear Magnetic Resonance (NMR) and Magnetic Resonance Imaging (MRI) became indispensable tools in physics, chemistry, biology,

and medicine with numerous applications that are highly relevant for enhancing our understanding of nature and for diagnosing diseases. It is narrated how a fundamental physics experiment took all the way into the medical clinical practice and became useful even for exploring psychological phenomena. George E. Pake has once said: "Magnetic resonance imaging is an irrefutable testimonial to the enormous value of basic research."