

Low-field NMR-MRI of Porous Media: Methods and Applications

Online Workshop on Wednesday, 8th June 2022



SCIENTIFIC PROGRAM (CET TIME ZONE)

09:30 – 09:45 - Opening Session (GIDRM Board)

Relaxometry & Quantitative MRI

09:45 10:10	Claudia Testa (University of Bologna)	"Introduction to low-field NMR and MRI"
10:10 10:35	Marco Barbieri (Stanford University)	"Fast acquisition and analysis techniques for quantitative NMR"
10:35 11:00	Angelo Galante (University of L'Aquila)	"Design of halbach magnets for low field MRI"

11:00 - 11:15 (virtual) coffee break

Single-Sided NMR all-round applications to Biomedicine, Industry and Cultural Heritage

11:15 11:40	Leonardo Brizi (University of Bologna)	"Single sided for tissue morphological parameter determination"
11:40 12:05	Cinzia Casieri (University of L'Aquila)	"20 years looking for water in artistic artifacts in the company of a mouse"
12:05 12:30	Tito Bonagamba (University of São Paulo)	"Mechanically oscillating samples in the presence of magnetic field gradients produced by single-sided magnets"

12:30- 14:00 (virtual) lunch break

Fast Field Cycling and inversion problem

14:00 14:25	Moreno Pasin (Stelar srl)	"FFC NMR relaxometry: an overview of theory, instrumentation and applications"
14:25 14:50	Lionel Broche (University of Aberdeen)	"FFC and MRI"
14:50 15:15	Pellegrino Conte (University of Palermo)	"FFC – model free"
15:15 15:40	Germana Landi (University of Bologna)	"Model Free data inversion with multipenalty regularization"
15:40 16:05	Stan Sykora (Extra Byte srl)	"From raw relaxometry data to applications - the territory of REX"

16:05-16:45 Discussion and Conclusions

Scientific Committee Local Organizing Committee

Marco Geppi
Marcello Alecci
Silvia Borsacchi
Mariapina D'Onofrio
Simonetta Geninatti Crich
Giacomo Parigi
Giuseppe Pileio
Claudia Testa
William Bortolotti
Leonardo Brizi

Claudia Testa
William Bortolotti
Leonardo Brizi
Fabiana Zama

To Participate: Attendance is free but participants need to register at www.gidrm.org; Deadline for registration is 5 June 2022. Contacts: bologna2022@gidrm.org
A Zoom link will be provided via e-mail to all participants before the event - Recommended time to connect: 09:15

