



Susceptibility-Weighted Imaging (SWI) and Quantitative Susceptibility Mapping (QSM) use the MRI signal phase to infer on an important physical property, namely magnetic susceptibility. Similarly, Electrical Property Tomography (EPT) uses the spatial distribution of the radiofrequency field to obtain tissue electrical properties. These properties depend on tissue composition, organ function, and ageing, and may change in the presence of disease and disease-modifying therapies. Therefore, they could potentially become useful, quantitative biomarkers for diagnostic and therapy monitoring. The goal of this first joint Workshop, [endorsed by the International Society of Magnetic Resonance in Medicine \(ISMRM\)](#), is to provide a forum to share the knowledge and foster the development of this exciting field. The preliminary program of the workshop includes one half-day Educational Program (on the afternoon of Sunday 3 Oct 2021) followed by 2.5 days of Scientific Workshop featuring 8 plenary sessions, 4 parallel sessions, 2 poster sessions, and time for interaction and round-table discussions.

SUNDAY Oct 3rd 2021			
14:00	Registration		
15:00	Educational Session 1 (2h) Plenary, QSM+EPT Motivation and history of MRI QSM & EPT Physics of QSM Physics of EPT Overview of acquisition and processing pipelines		
16:00	COFFEE BREAK		
17:00	<table border="1"> <tr> <td> Educational Session 2 (2h) (QSM-specific) advanced topics </td> <td> Educational Session 3 (2h) (EPT-specific) advanced topics </td> </tr> </table>	Educational Session 2 (2h) (QSM-specific) advanced topics	Educational Session 3 (2h) (EPT-specific) advanced topics
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18:00			
19:00	Workshop registration + "APERICENA" (small dinner)		

Monday Oct 4th 2021

8:30	Registration	
9:00	<p>Session 1 (plenary) <u>Biological background, from tissue to MR signal</u> Session introduction (5 min) 1 invited speaker (20 min + 5 min QA) and 4 selected oral presentations (each 12 min + 3 min QA)</p>	
10:00	COFFEE BREAK	
11:00	<p>Session 2 (plenary) <u>Combined QSM+EPT acq&recon (including D.L.-based methods)</u> Session introduction (5 min) 1 invited speaker (20 min + 5 min QA) and 4 selected oral presentations (each 12 min + 3 min QA)</p>	
12:00	POWER PITCHES	
13:00	LUNCH	
14:00	POSTER SESSION	
15:00	<p>Session 3 (parallel, QSM) <u>Advanced QSM methods</u> 1 invited + 4 selected oral pres.</p>	<p>Session 4 (parallel, EPT) <u>High-frequency</u> 1 invited + 4 selected oral pres.</p>
16:00	COFFEE BREAK	
17:00	<p>Session 5 (parallel, QSM) <u>Advanced QSM appl.: STI, OEF...</u> 1 invited + 4 selected oral pres.</p>	<p>Session 6 (parallel, EPT) <u>Low-frequency</u> 1 invited + 4 selected oral pres.</p>
18:00	optional social event: city tour	
19:00	SOCIAL DINNER	

Tuesday Oct 5th 2021

8:30	Registration
9:00	Session 7 (plenary) <u>Clinical applications: QSM/brain</u> Session introduction (5 min) 1 invited speaker (20 min + 5 min QA) and 4 selected oral presentations (each 12 min + 3 min QA)
10:00	COFFEE BREAK
11:00	Session 8 (plenary) <u>Clinical applications: QSM/body</u> Session introduction (5 min) 1 invited speaker (20 min + 5 min QA) and 4 selected oral presentations (each 12 min + 3 min QA)
12:00	POWER PITCHES
13:00	LUNCH
14:00	POSTER SESSION
15:00	Session 9 (plenary) <u>Clinical applications: EPT</u> Session introduction (5 min) 1 invited speaker (20 min + 5 min QA) and 4 selected oral presentations (each 12 min + 3 min QA)
16:00	COFFEE BREAK
17:00	Session 10 (plenary) <u>Standardization, Reproducibility, Challenges</u> "QUantitative Imaging Enables Reproducible Outcomes (QUIERO)" Round table discussion: datasharing, EPT challenge, establish consortia
18:00	QSM & EPT: a marriage or divorce? Survey & open discussion
19:00	SPLIT DINNERS: Steering committee dinner, small group (topic-based) dinners

Wednesday Oct 6th 2021	
9:00	<p>Session 11 (plenary)</p> <p><u>Part 1: Local groups (MRF-based QSM/EPT, fQSM ...)</u></p> <p><u>Part 2: Advances in QSM and EPT</u></p>
10:00	COFFEE BREAK
11:00	<p>Session 12 (plenary)</p> <p><u>(based on abstracts, new trends)</u></p> <p>4 selected oral presentations (each 12 min + 3 min QA)</p>
12:00	Awards, announcements, closing remarks
13:00	BOXED LUNCH / TAKE AWAY

The workshop will be held at the [IMT School for Advanced Studies Lucca, Italy](#). The venue can be conveniently reached from the International airports of Pisa (PSA, 30 min by taxi) and Florence (FLR, 50 min by taxi).

Registrations to the workshop are not open, yet.

Registration fees (by July 31st 2021) are:

- Standard: Euro 340,00
- Student: Euro 340,00

Fees also include all meals indicated in the program.

After July 31st 2021, fees will be increased by Euro 50,00.

See you in Lucca!

The Organizing Committee:

Mauro Costagli, Ph.D., Pisa, 2021 QSM Workshop Chair

Luca Zilberti, Ph.D., Turin, 2021 EPT Workshop Chair

Emma Biondetti, Ph.D., Paris

Mirco Cosottini, M.D., Pisa

Stefano Mandija, Ph.D., Utrecht

Emiliano Ricciardi, M.D., Ph.D., Lucca

Michela Tosetti, Ph.D., Pisa

Updated on Aug 14th, 2020