



# EXTENDING VISION, EXPANDING MINDS & IMPROVING LIFE THROUGH MR

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GROUNDBREAKING MR SCIENCE • SUPERIOR MR EDUCATION • GLOBAL NETWORKING



Charité - Universitätsmedizin Berlin, Berlin, Germany • 25-26 August 2022

## **OVERVIEW**

This workshop will focus on methods, applications, and future perspectives of magnetic resonance elastography (MRE). MRE is of increasing relevance in medical diagnostics as it permits quantitative imaging of the viscoelastic properties of soft tissues. This workshop addresses both clinical applications and recent technical developments in MRE. Considering the growing interest in the clinical application of MRE, the workshop will discuss the potential and current role of MRE in multiparametric MRI towards the objectified characterization of pathobiological processes underlying many diseases including chronic liver and kidney diseases, tumors, and neurological disorders.

### **EDUCATIONAL OBJECTIVES**

Upon completion of this activity, participants should be able to:

- Describe the value of MRE in clinical routine and basic research;
- Describe the current developments of MRE, including hardware setup, data acquisition methods, and post-processing strategies;
- Explain the biological processes/structures/changes that can influence mechanical tissue properties quantified by MRE; and
- Discuss the future direction of MRE for clinical applications.

#### TARGET AUDIENCE

This workshop invites participants with interest in medical applications and basic research of MRE. Although most of the sessions will require a basic understanding of MRE or tissue biomechanics, there will be a basic introductory course as well as posters on the principles of MRE. The target audience of the workshop is MR physicists, clinicians with interest in MRE, radiologists, biomedical engineers, as well as biologists whose research interest lies in the area of tissue biomechanics.

#### ORGANIZING COMMITTEE

Committee Chair: Jing Guo, Ph.D.

Committee: Stephan R. Marticorena Garcia, M.D.; Ingolf Sack, Ph.D.

For more information including housing & registration, please visit: www.ismrm.org or call + 1 510 841 1899