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ISMRM Workshop on Motion Detection & Correction

Merton College, Oxford, England, UK • 30 August - 02 September 2022

OVERVIEW

This workshop will explore issues, methods, and opportunities associated with motion detection and correction in MRI and MRS. The impact and incidence of motion from a clinical perspective will be presented. Generic tools and methods for both reducing and handling motion will be discussed, including newer techniques exploiting machine learning. The impact of motion upon both the image signal and spectroscopy data will also be explored.

EDUCATIONAL OBJECTIVES

Upon completion of this activity, participants should be able to:
• Summarize the underlying causes of motion artifacts in MR images;
• Discuss the effects of motion on clinical and research scans;
• Apply methods to simulate motion damage;
• Recognize coordinate systems, transformations, and image registration;
• Assess the latest work on motion estimation and correction using intrinsic and extrinsic techniques;
• Discuss motion correction in fetal imaging and in therapy planning;
• Discuss the use and quantification of physiological motion for clinical opportunities; and
• Evaluate the future direction of motion correction in magnetic resonance.

TARGET AUDIENCE

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ORGANIZING COMMITTEE

Committee Co-Chairs: David Atkinson, Ph.D.; Aaron T. Hess, Ph.D.
Committee: Daniel Gallichan, D.Phil.; Mark Jenkinson, Ph.D.; Phil Lee, Ph.D.; Claudia Prieto, Ph.D.; Stefan Skare, Ph.D.;
M. Dylan Tisdall, Ph.D.; Nadine N. Graedel, Ph.D. (Trainee Observer)

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