

ISMRM Workshop on: Simultaneous Multi-Slice Imaging: Neuroscience & Clinical Applications



19–22 July 2015 • Asilomar Conference Grounds
Pacific Grove, CA, USA

TARGET AUDIENCE: The workshop is designed for scientists including, physicians, physicists, engineers, computer scientists, mathematicians, trainees working on pulse sequences, RF coil design, image reconstruction, neuroscience and body imaging, MRI technologists, neuroscientists, clinical investigators and anyone pursuing diffusion or fMRI applications of SMS imaging.

COMMITTEE CHAIRS:

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OVERVIEW

Simultaneous Multi-Slice (SMS) imaging, also referred to as multi-band and multiplexed, has achieved unprecedented speed in functional and diffusion imaging and now promises high impact in clinical imaging. This workshop focuses on recent SMS technological developments and translation into radiological and neuroscience imaging. Talks will include topics of pulse sequences, controlled aliasing, image reconstruction and parallel receiver hardware and neuroscience and clinical evaluations.

The workshop emphasizes inclusiveness of international speakers and aims to educate MRI scientists, neuroscientists and clinical investigators. Discussions and interactions will be facilitated at this beautiful California coastal retreat center which has housed many important NMR and MRI meetings.

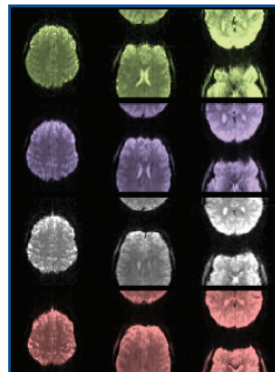
WORKSHOP FORMAT

The format will include both educational and topical scientific presentations describing cutting-edge technical developments for simultaneous imaging, with the aim of enhancing mutual understanding across several technical areas of research and bridging knowledge gaps to areas of clinical and neuroscience applica-

EDUCATIONAL OBJECTIVES

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

- Describe the evolution of the simultaneous multi-slice (SMS) imaging technology as a parallel imaging technique;
- List currently available, established or emerging SMS techniques;
- Discuss the measurements of SMS imaging performance by metrics of g-factor, leakage factor, temporal SNR and image artifacts;
- Review the use of SMS imaging for neuroscience and clinical applications; and
- Define appropriate use of SMS pulse sequences and the constraints of RF receiver coil arrays and parallel imaging acceleration factors.



The International Society for Magnetic Resonance in Medicine designates this live activity for a maximum of 12.75* AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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