



iMRI Invited Session

SY14-4

## Deep Learning in Cardiac MR Imaging

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Deep learning (DL) has been applied to the entire workflow in Cardiovascular magnetic resonance (CMR) imaging. In this lecture, the DL techniques used in CMR are introduced. First, the intelligent localization of CMR using deep learning is shown, which helps shorten the acquisition time. Then, the DL-based fast CMR imaging technique is introduced. It is a very hot topic in recent years and shows promising results. Finally, we talk about some research works about DL-based CMR image analysis, including automatic myocardial segmentation, scar identification, and T1 and T2 mapping analysis, etc. In the future, we believe deep learning will have more advances in this field.

*Keywords: Deep learning, CMR imaging*