

1135-VN-2102 **Alyssa E. Burgueno***, 900 S. Palm Walk, Tempe, AZ 85281, and **Rodrigo Platte**. *Magnetic Resonance Recovery from Single-Shot Time Dependent Data*.

Magnetic resonance imaging (MRI) captures the alignment of water molecules subject to a magnetic field, which are then computed with an inverse Fourier transform. Traditional MRI, using the standard image recovery model, traverses Fourier space to recover images accurately at the cost of scan time. This project employs a new reconstruction model; though it yields computational inefficiencies, the new model supports fast data acquisition, recovers additional information, and is more suitable to mitigate patient motion. (Received September 25, 2017)