

Session: Hands-on primer on Sequences (Design) for Mapping
Educational Track 2: From Hardware to Map

Pulseq for mapping

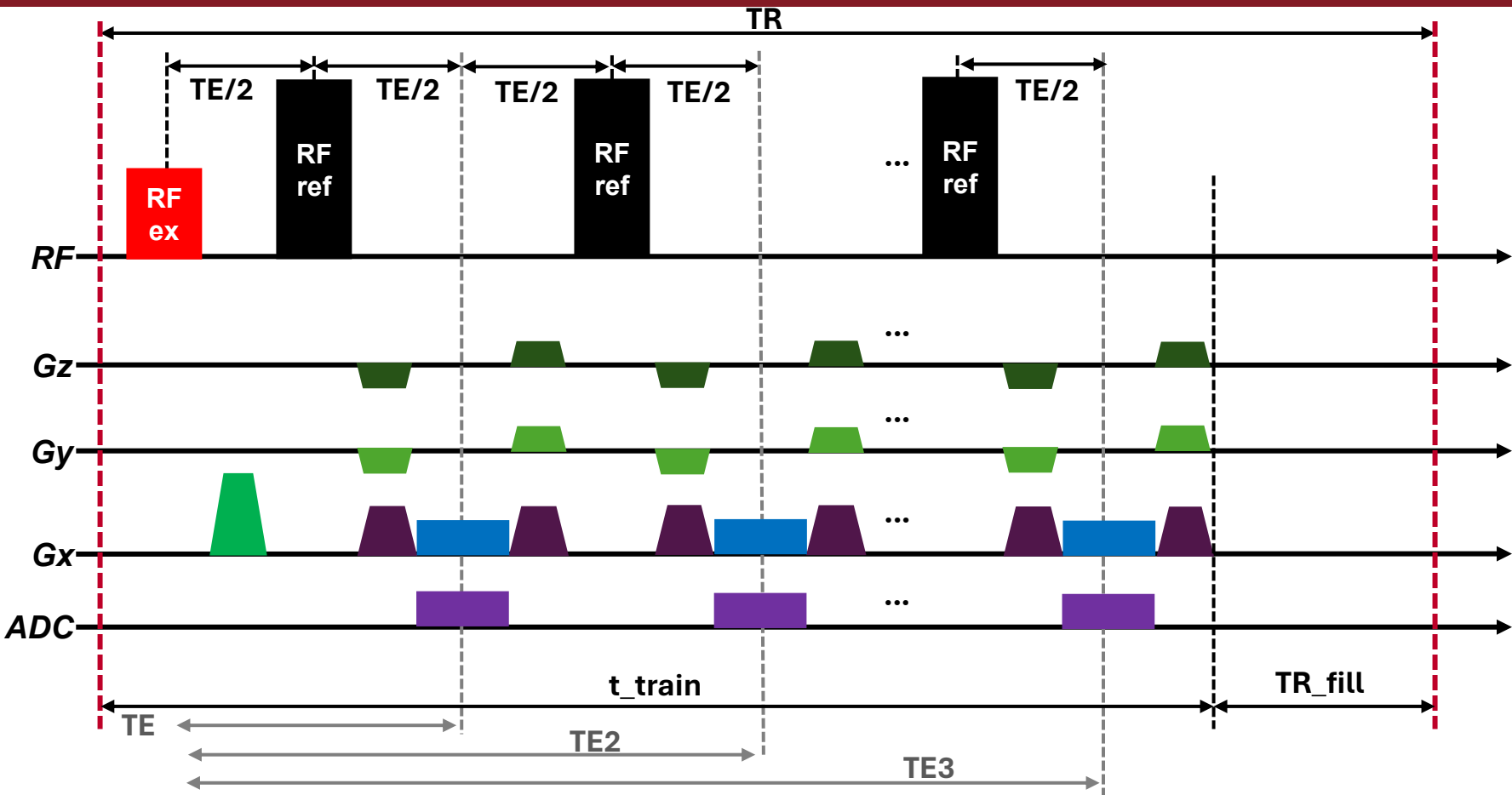
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T2 mapping (s20_from_3d_se_to_3d_mse)



T1 mapping (s30_2D_IR_SE_T1mapping)

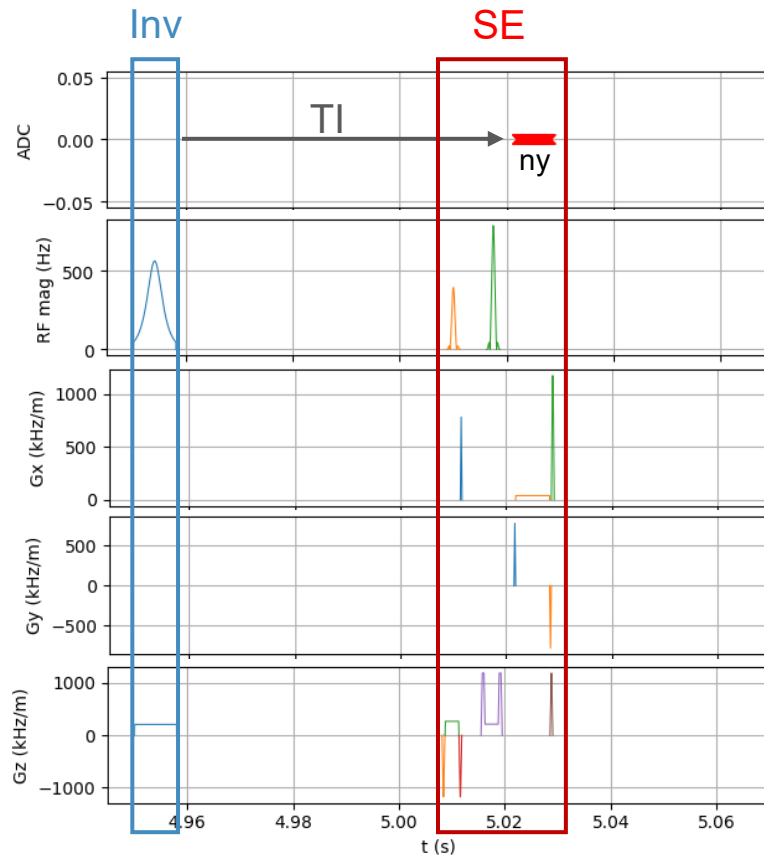
Sample the longitudinal magnetization
recovery curve for T1 mapping

Inversion recovery SE

(one k-space line per inversion)

$TR > 5 \cdot T1$

s30_2D_IR_SE_T1mapping.ipynb



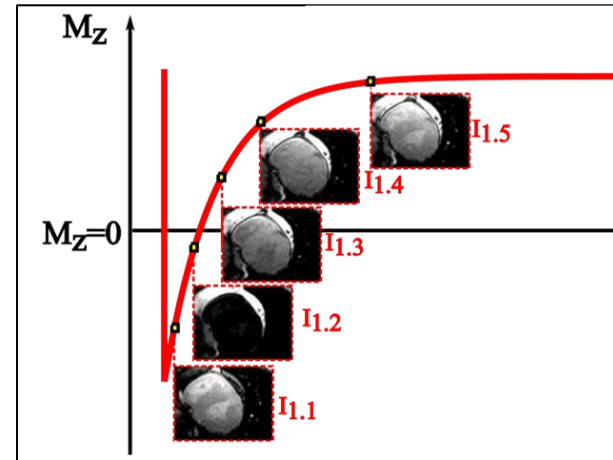
T1 mapping

IR SE

- Too long (>1h)

IR GRE

- Effect of the readout in recovery curve
- Faster



T1 mapping

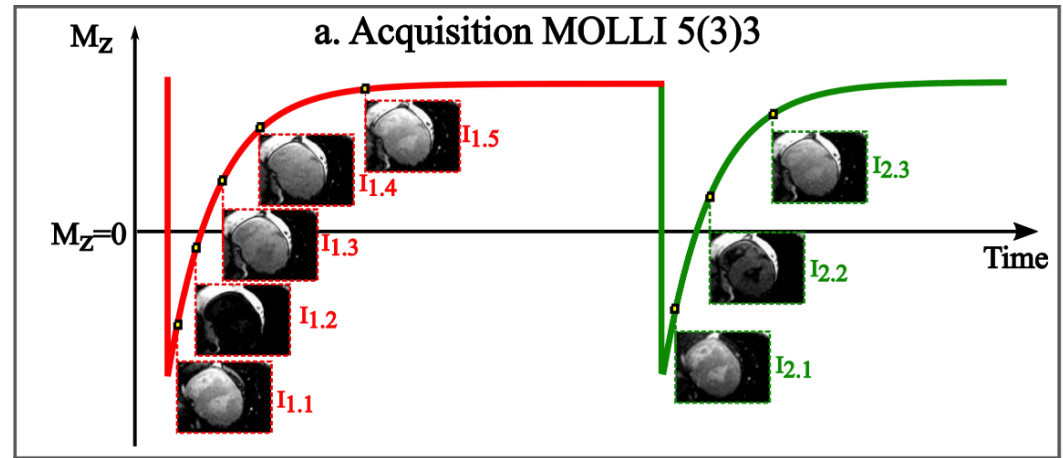
IR SE

- Too long (>1h)

IR GRE

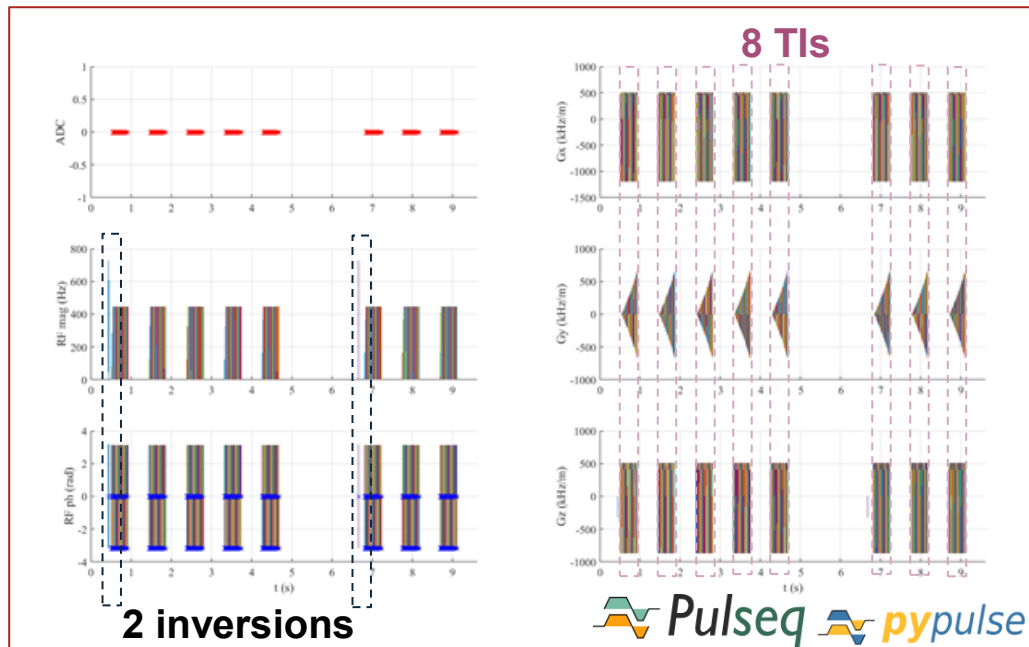
- Effect of the readout in recovery curve
- **Faster**

IR GRE and trigger for cardiac



Open-MOLLI

Open-source myocardial **T1** mapping sequence for fast prototyping



pyOpenMOLLI.ipynb

Repository



<https://github.com/asgaspar/OpenMOLLI>

3. Gaspar AS, et al. *MRM*. 2024.