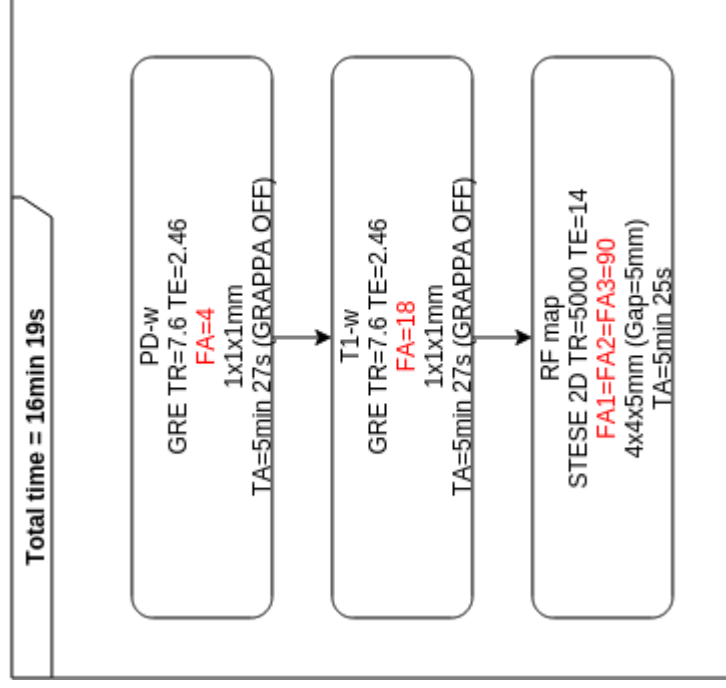# T1-mapping protocol

Basis protocol
1mm isotropic resolution (no Grappa)

Total time = **16min 19s**

PD-w
GRE TR=7.6 TE=2.46
FA=4
1x1x1mm
TA=5min 27s (GRAPPA OFF)

T1-w
GRE TR=7.6 TE=2.46
FA=18
1x1x1mm
TA=5min 27s (GRAPPA OFF)

RF map
STESE 2D TR=5000 TE=14
FA1=FA2=FA3=90
4x4x5mm (Gap=5mm)
TA=5min 25s

0.8 mm
SNR↓ ~4

Total time = **14min 31s**

PD-w
GRE TR=7.6 TE=2.46
FA=4
0.8x0.8x0.8mm
TA=4min 33s (GRAPPA=2)

T1-w
GRE TR=7.6 TE=2.46
FA=18
0.8x0.8x0.8mm
TA=4min 33s (GRAPPA=2)

RF map
STESE 2D TR=5000 TE=14
FA1=FA2=FA3=90
4x4x5mm (Gap=5mm)
TA=5min 25s