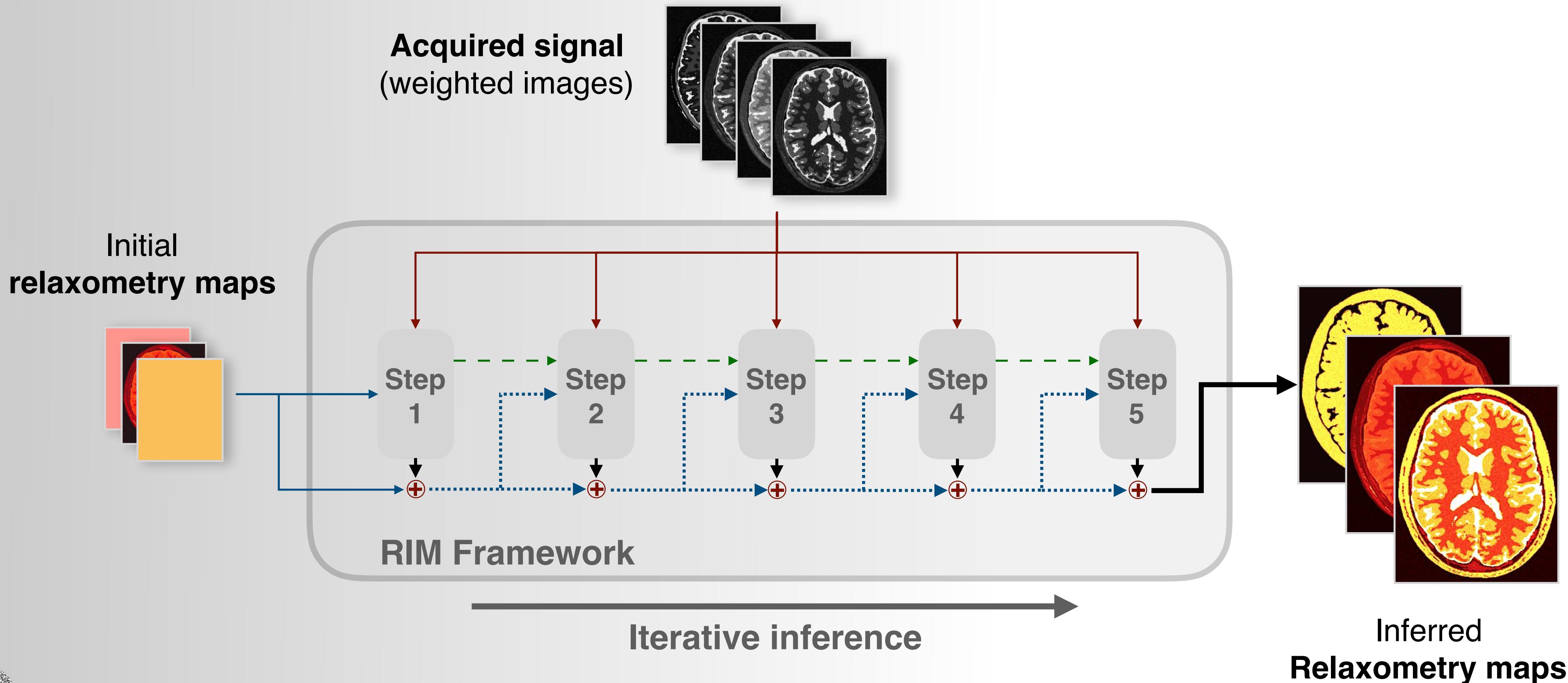
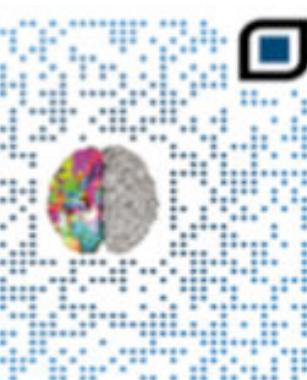


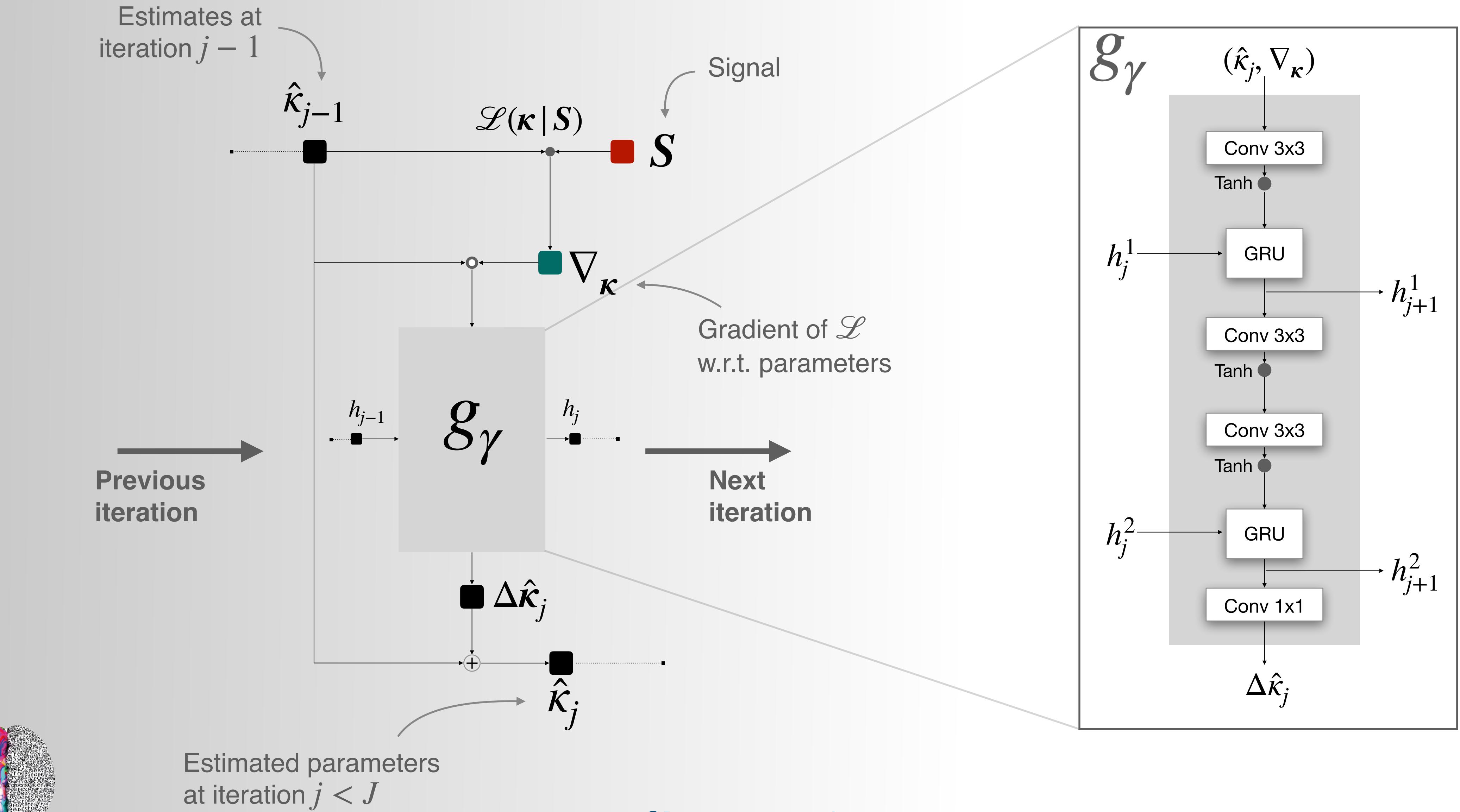
Recurrent Inference Machines as Inverse Problem Solvers for MR Relaxometry

E. R. Sabidussi, S. Klein, M. W. A. Caan, S. Bazrafkan, A. J. Den Dekker, J. Sijbers, W. J. Niessen and D. H. J. Poot

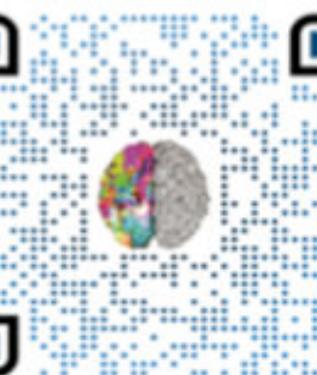




The Recurrent Inference Machines in detail



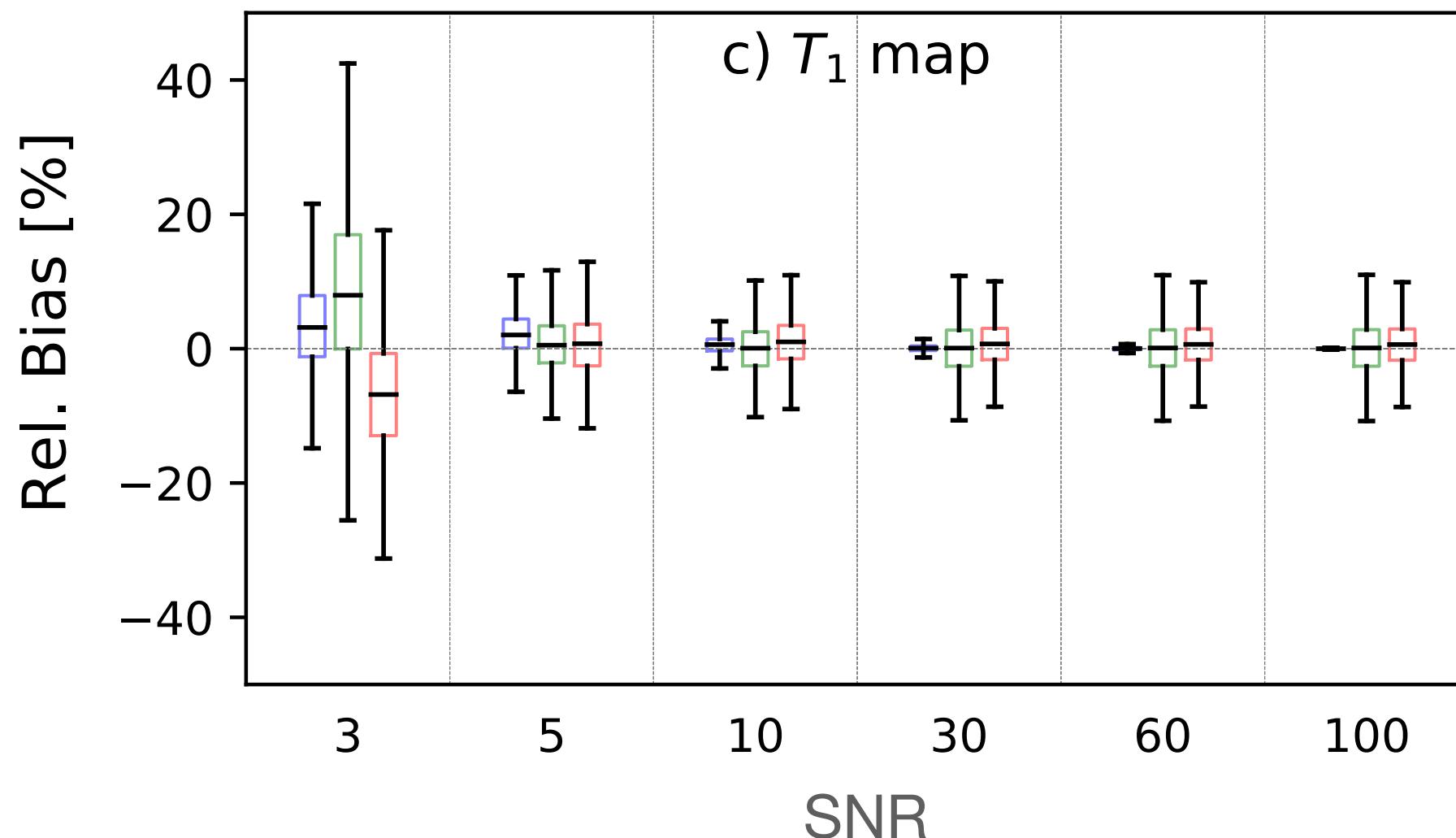
RIMs for T_1 mapping



High estimation precision

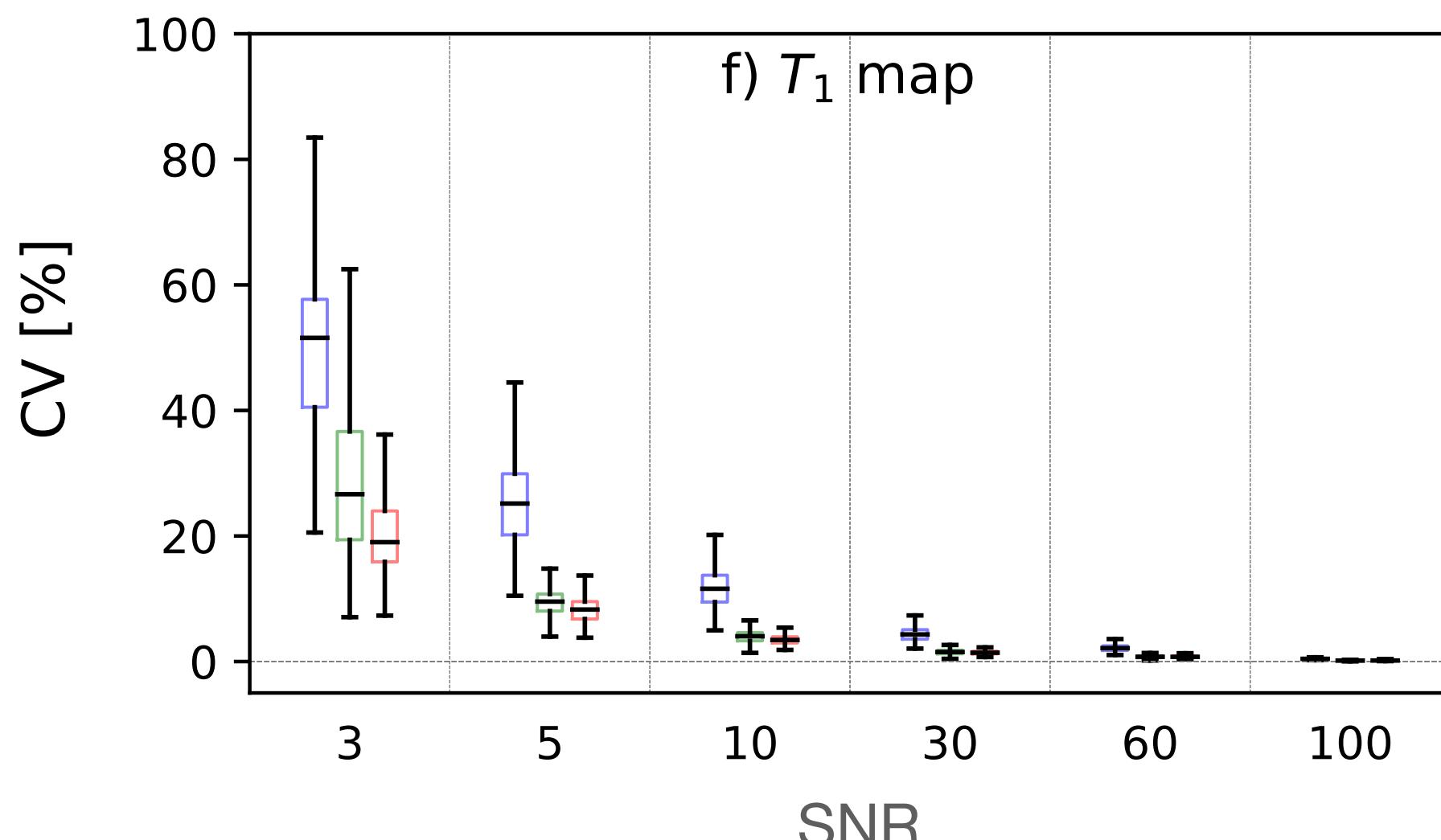
The RIM improves the estimation precision, without compromising in accuracy.

— MLE — ResNet — RIM



Learning an efficient prior

The RIM learns a prior that can generalise well across noise levels



Hybrid framework

The data consistency term in the RIM allows for lower estimation variability than other feed-forward networks



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