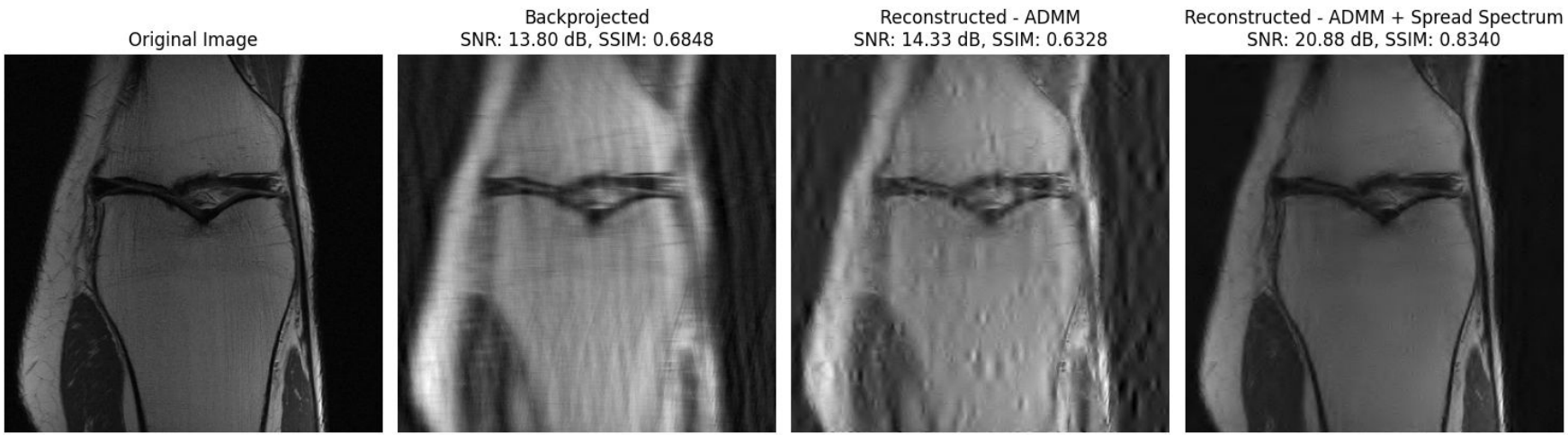
Optimisation and Deep Learning for Imaging and Vision I

Project Updates

Week 7 - M1

ADMM - Default vs. Spread Spectrum

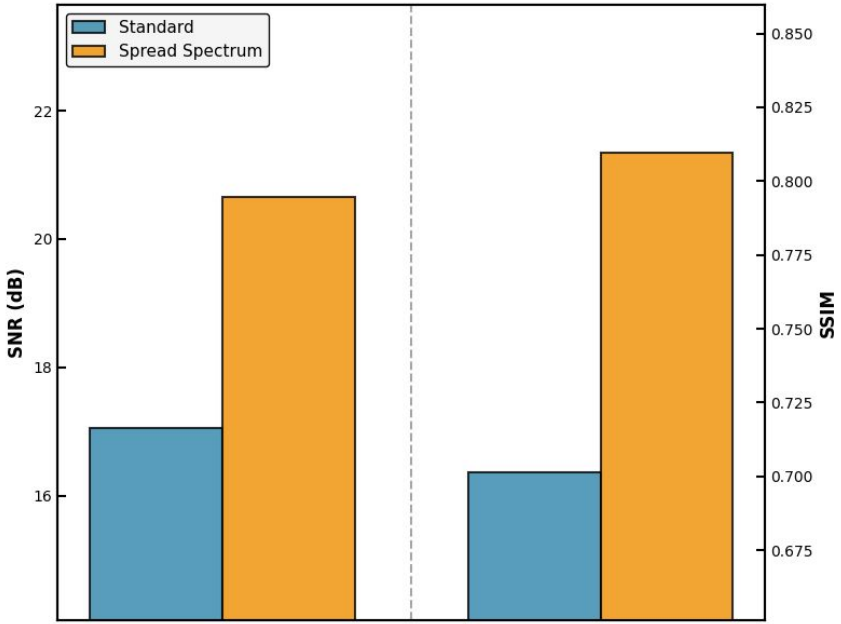
Evaluated on the first image of the Test Set using default parameters



Week 7 - M1

ADMM - Default vs. Spread Spectrum

Average Performance across Test Set using default parameters

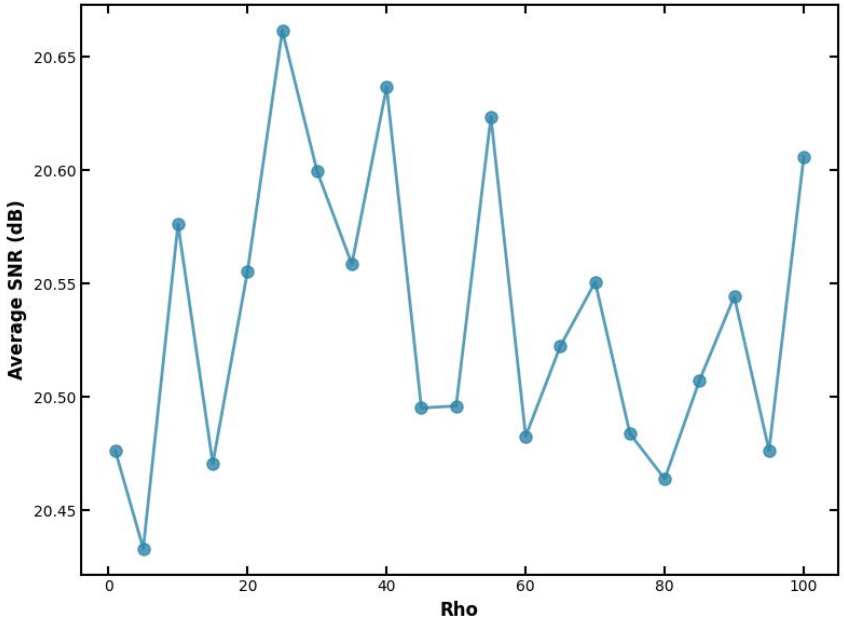


Week 7 - M1

Spread Spectrum - Rho

Average Performance across Test Set using default parameters

→ rho = 25



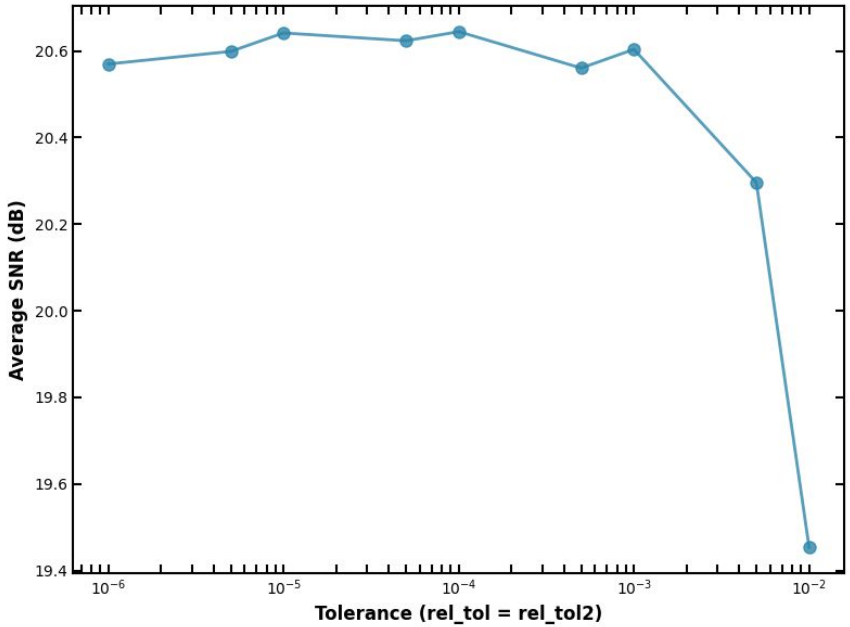
Is this statistically robust enough? Should we average across multiple runs?

Week 7 - M1

Spread Spectrum - Relative Tolerance

Average Performance across Test Set using default parameters and rho=25, max_iter=10000

→ rel_tol = rel_tol2 = 1e-4



Week 7 - M1

Questions:

- Use TV Norm instead of l1?