A Sequence of optimal pairings and reconstruction of the signal s

$\mathbf{s}$

$\mathbf{\Phi^M s}$

$\mathbf{\Phi^M \Psi^M s}$
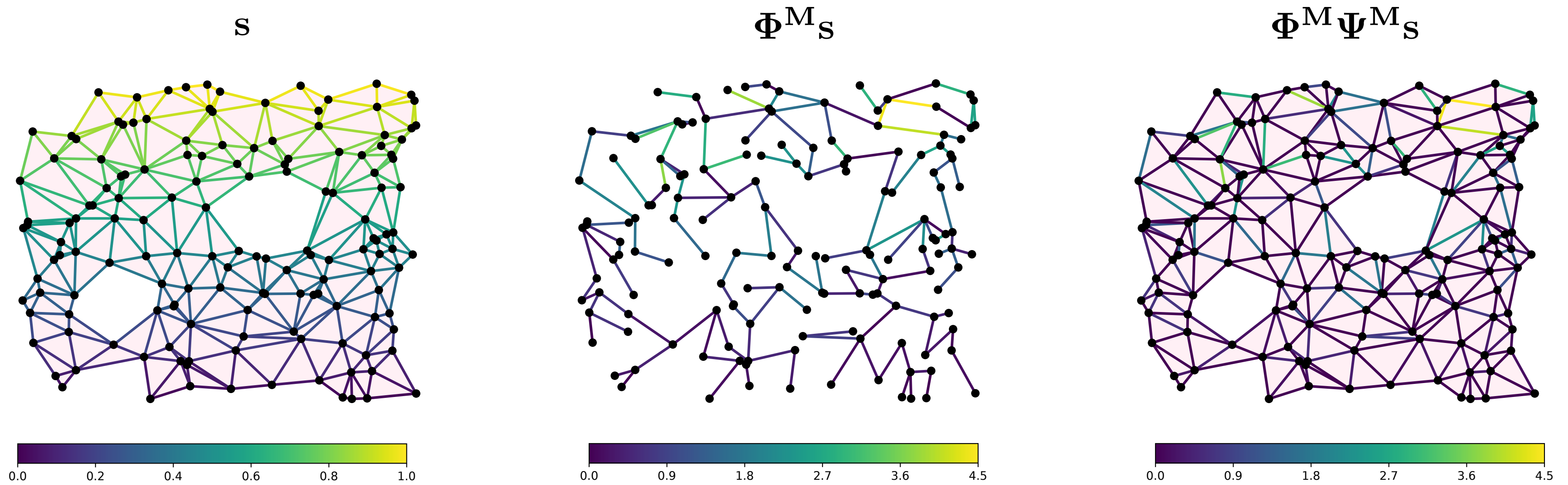
B Reconstruction error

$|\mathbf{s} - \mathbf{\Phi^M \Psi^M s}|$
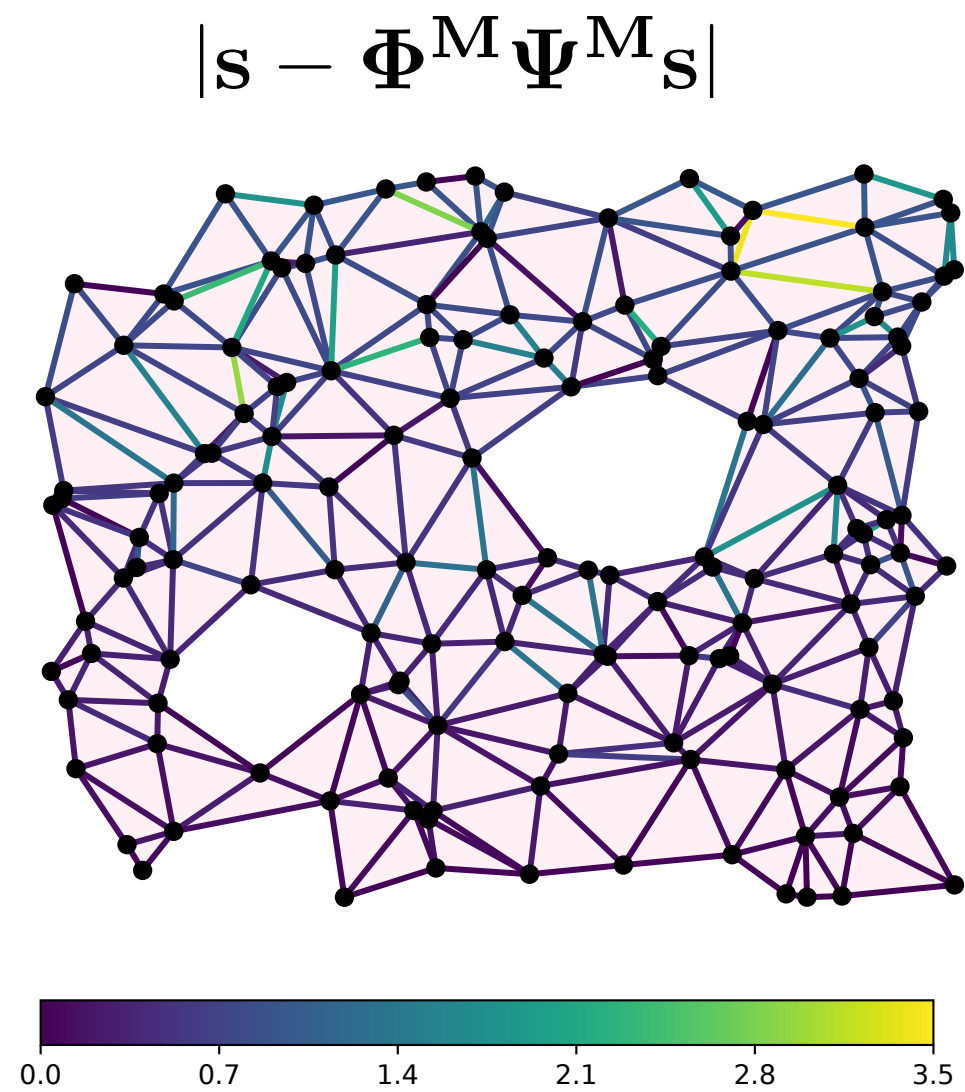
C Projection of s and $\Phi^M \Psi^M s$ on the Hodge basis

projection of s
projection of $\Phi^M \Psi^M s$

$\mathrm{Ker}\Delta_1$ $\quad$ $\mathrm{Im}\partial_1^\dagger$ $\quad$ $\mathrm{Im}\partial_2$