

Matlab code for Fourier phasing with phase-uncertain mask

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1 Functions

1. **Main:** the main function where images, random phase/uniform illuminations (with or without uncertainty) and Fourier intensity measurements are generated.
2. **Figure7:** the code of producing results in Figure 7 of [2].
3. **Figure8:** the code of producing results in Figure 8 of [2].
4. **Figure9:** the code of producing results in Figure 9 of [2].
5. **DR:** the function of realizing Douglas Rachford (DR) followed by Error Reduction (ER) if mask is exactly known, i.e. $\delta = 0$.
6. **DR_NoisyMask:** the function of realizing Alternating Douglas-Rachford and Error-Reduction (DRER) followed by Alternating Error Reduction (AER) when the mask phases are uncertain, i.e. $\delta > 0$. Images as well as masks are updated at each iteration.

References

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