

Understanding the CTF (Contrast transfer Function)

Roberto Marabini

1 Theoretical Background

The contrast transfer function (CTF) mathematically describes how aberrations in a transmission electron microscope (TEM) modify the image of a sample[1]

2 Objective

Using Matlab recreate the three subimages shown in article [1] figure 3. Be aware that one of them may be wrong.

3 Bibliography

[1] R.H. Wade, A brief look at imaging and contrast transfer, Ultramicroscopy, Volume 46, Issues 1–4, 1992, Pages 145-156, ISSN 0304-3991, Doi:[https://doi.org/10.1016/0304-3991\(92\)90011-8](https://doi.org/10.1016/0304-3991(92)90011-8).