

Turbulence propagation simulator project reading list:

Scalar diffraction theory and numerical simulation of optical propagation

Numerical Simulation of Optical Wave Propagation with Examples in MATLAB

- Ch 1-4,6

Introduction to Fourier Optics Goodman

- Ch 2-5

Good ol' Wikipedia

- <https://en.wikipedia.org/wiki/Diffraction>
- https://en.wikipedia.org/wiki/Fresnel_diffraction
- https://en.wikipedia.org/wiki/Fraunhofer_diffraction

Optics

Optics – Hecht

- 4,9,10,11 Wave propagation and Fourier optics
- 5,6 Geometric optics

Imaging Systems Analysis

Numerical Simulation of Optical Wave Propagation with Examples in MATLAB

- Ch 5

Introduction to Fourier Optics Goodman

- Ch 6,7

Laser Beam Propagation through Random Media – Andrews and Phillips

- Ch 14, Zernike polynomial description

Turbulence Theory

Laser Beam Propagation through Random Media – Andrews and Phillips

- Ch 2,3
- Ch 4,5,6

UCSC Astronomy 289 AO Lectures

- Lecture 2 and 3

Adaptive Optics in Astronomy - François Roddier

- Ch 2

<http://www.ctio.noao.edu/~atokovin/tutorial/part1/turb.html>

<http://community.dur.ac.uk/james.osborn/thesis/thesis.html#thesisch2.html>
<https://faculty.virginia.edu/ASTR5110/lectures/atmos1/turbulence.html>