TW modified the VIPR algorithm for our dipole orientation model based on VIPR paper.

*Ferdman, Boris, et al. "VIPR: vectorial implementation of phase retrieval for fast and accurate microscopic pixel-wise pupil estimation." Optics Express 28.7 (2020): 10179-10198.*

**Main\_dipole.m**

This is the main running code mode.

**VIPR\_user\_input\_ dipole.m**

This is place where you set your microscope parameters and prepare data for phase retrieval.

The initial state is data for bead data captured using pixOL\_com with NPF focused on the beads.

**utils**

In the folder, all functions with a name ended with ‘2’ are TW modified function to fit for isotropic dipole model.

**Main\_origin.m & VIPR\_user\_input.m**

Original VIPR code