Structural Analysis of Potential Dual Quasar Pairs Using Galactic Modeling Software

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The study of dual quasar systems has recently been of heightened interest. Quasars play an important role in galactic evolution theory, and dual quasar systems have implications of altering Active Galactic Nuclei behavior. In this project, several selected potential dual quasar systems will be thoroughly analyzed using GALFIT, a morphological modeling program. Point Source Functions will be built for each source to account for optical aberrations in Hubble Telescopes. Through GALFIT analysis, candidates will either be accepted as true dual quasars, or rejected as gravitational lenses, minor galaxy mergers, or other systems falsely resembling dual quasars.

Date Accepted: _____