

QUASAR STRUCTURE INFERRED FROM MICROLENSING

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Although the entire literature about quasar structure is written for accretion disc dominated X-ray - optical - infrared emission, actual observations of quasar microlensing and other structure indicators show this model to fail. The failure for Q2237 and Q0957 is well known from several authors; the accretion disc models predict large brightness events never observed, they give sub-stellar mass determinations for stellar microlensing events, and they cannot produce the rapid microlensing discovered.

I explore an empirical quasar model that reproduces all the observations available, and I show that it has properties extremely similar to the magnetic dominated MECO models, which are now also being applied to Quasi-Periodic effects in solar mass Galactic Black Hole candidates. As for the Galactic objects, our MECO models are found in the stable transition between the Low-Hard and High-Soft states; they have a bright inner ring and, in our case, the outer bright Elvis outflow structures.