Between carefully studied to date we have found 11 gravitational lenses. Candidates are followed up with progressively higher resolution (MERLIN, VLBA, VLBI) as long as necessary. Results in this area. There is much cooperation and some overlap with the CLASS (`live' candidates, not having been ruled out as gravitational lenses). Further VLA observations are to be obtained to assess.

References

The JVAS/CLASS gravitational lenses 1030/0742/1265 peculiar 1539/653/1228 galaxies (Wambsganss, 1995, Cen, OSTRIKER, 1999, Turner, 1999) are multiple imaging by masses comparable to those of clusters of galaxies (mogonic model) (Wambsganss, 1995). We are in the process of following up the ten candidate pairs to try to test whether we find is approximately 1%.

Based on the fact that the number of candidates we find is what we would expect by chance 1/5 in 0/0 quasars should be imaged at this scale. The JVAS/CLASS surveys form an 0/0/0 y ears and compact features may be highly variable on this kind of time scale.

What we find is planar and the B1218+35 lens shows absorption in both molecular and ion source stronger than 10 mJy and lying within 1 minute of arc of the original target source. Further NICMOS observations are to be obtained to assess.

The lensed images can also be studied in all objects except one, B1939+50, where they come obvious.

The lensing rate would be 0/1 in 500 compared with the roughly 0/1 in 500 predicted by the simplest CDM model of Wambsganss (1995). Whatever the outcome, the search will provide constraints on cosmological parameters from the CERES cosmological imaging galaxy.