

U15b Magnetic field in gravitational lens galaxies

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The origin and evolution of large scale magnetic fields is a challenging problem. Differential Faraday Rotation, between multiple images, of polarized radiation from high redshift lensed radio sources provides a reliable probe of the magnetic field strength of the intervening lens galaxy. It is unaffected by the source environment and, in principle, differential Faraday Rotation in 4-image systems could provide information on global structure of the field in the lens galaxy, like, for example, axisymmetric or bi-symmetric. I show that, there is evidence for coherent magnetic field both in spiral and elliptical galaxies at intermediate redshifts.