

## WS2012 Lectures on galaxies, microlensing, black hole masses

### Lecture 1: The weight of a galaxy

Case study: B1938+666, AO vs. HST

"A high-resolution multi-band view of the infra-red Einstein ring of JVAS B1938+666"

D. J. Lagattuta et al. 2012, MNRAS 424, 2800

### Lecture 2:

Case study: Black Hole Mass Estimates from CASTLES lenses

"Black Hole Mass Estimates Based on CIV are Consistent with Those Based on the Balmer Lines"

R.J. Assef et al. 2012, ApJ 742, 93 Monday 12 Nov 9:00-10:15

### Lecture 3: Microlensing in Lensed QSOs

Case study: SDSSJ1004+4112, SDSSJ1029+2623, HE1104-1805

"Measuring Microlensing using Spectra of Multiply Lensed QSOs"

V. Motta et al. 2012 ApJ 755, 1, 82

### Lecture 4: Microlensing of Quasar Broad Emission Lines

Case study: 18 image pairs in 16 lenses

"Microlensing of Quasar Broad Emission Lines: Constraints on Broad Line Region Size"

E. Guerras et al. 2012, astro-ph/1207.2042