

Cover Page



Universiteit Leiden

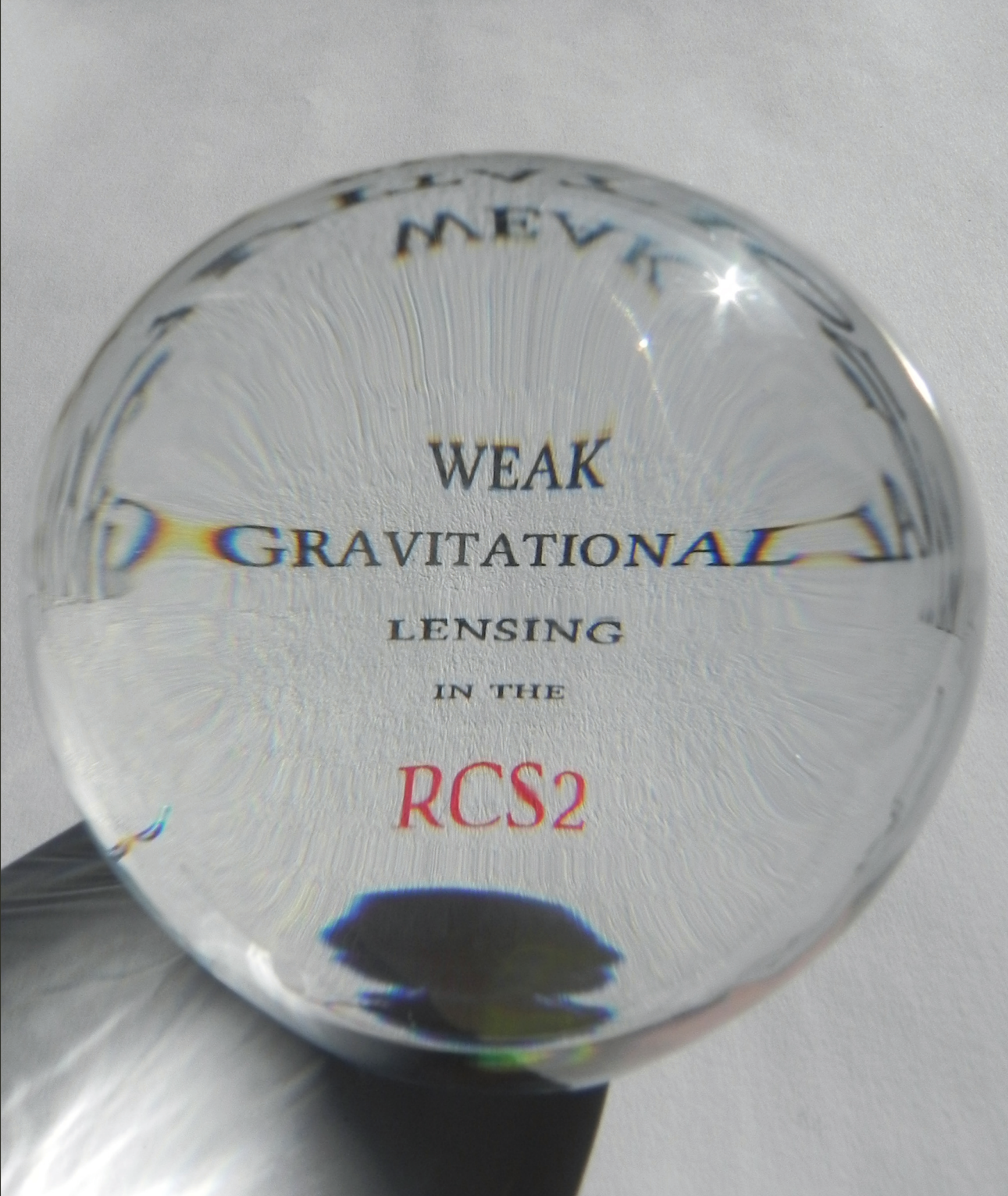


The handle <http://hdl.handle.net/1887/19026> holds various files of this Leiden University dissertation.

Author: Uiter, Edo van

Title: Weak gravitational lensing in the red-sequence cluster survey 2

Date: 2012-05-29



Edo van Uitert

WEAK GRAVITATIONAL LENSING IN THE **RCS2**

EDO VAN UITERT

$$M_{\text{vis}} = m - (K(z=0.0) + DM(z))$$

$$M_{\text{vis}} \rightarrow M_r : M_{\text{vis}} + \Delta K - 5 \log \frac{D_L}{D_S} \approx 0.2$$

$$= 0.2 + 0.77 = 0.97 + 1.6$$

$\langle P(M_{\text{vir}}|M_K) n(M_{\text{vir}}) \rangle =$

$\uparrow$

$e^{-\log(\frac{M-M_{\text{vir}}}{2\sigma})^2}$

$\rightarrow \chi^2_{\text{min}} = \frac{1}{N} \sum_i \frac{w_i^2 \Delta z_i^2 q_i^2 \cos^2(2\Delta\theta_i)}{N_{\text{iso}} + 2N_{\text{ao}} q_i^2 \cos(2\Delta\theta_i)}$

$(\frac{1}{1-x} = \sum_{n=0}^{\infty} x^n \text{ for } |x| < 1)$

$\chi^2_{\text{min}} = \frac{1}{N} \sum_i \frac{w_i^2 \Delta z_i^2 q_i^2 \cos^2(2\Delta\theta_i)}{1 + f_{\text{bg}}}$

$f_{\text{iso}} = \frac{1}{N} \sum_i w_i^2 \Delta z_i^2 q_i^2 \cos^2(2\Delta\theta_i)$

$N = \sum_i 2 w_i^2 q_i^2 \cos^2(2\Delta\theta_i)$