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Light weighed: on the statistics and systematics of weak gravitational lensing

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Light Weighed:
On the Statistics and Systematics of Weak
Gravitational Lensing
by
Galaxy Groups and Clusters

Proefschrift

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*“The dreams of childhood – its airy fables,
its graceful, beautiful, humane, impossible adornments of the world beyond;
so good to be believed in once, so good to be remembered when outgrown.”*
– Charles Dickens, *Hard Times*

*Voor Marije,
voor alle dromen die we samen werkelijkheid maken*

*Voor Annelie,
dat jouw dromen en verbeelding eindeloos mogen zijn*

*In herinnering aan mijn vader George,
als dromer, lezer en denker in grootse verhalen*

*“Why do you go away? So that you can come back.
So that you can see the place you came from with new eyes and extra colors.
And the people there see you differently, too.
Coming back to where you started is not the same as never leaving.”*
– Terry Pratchett, *A Hat Full of Sky*

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Cover:

The foreground is an engraving of a “portable” camera obscura in Athanasius Kircher’s *Ars Magna Lucis Et Umbrae* (1645).

The background is the strong lensing cluster Abell S1063, as observed by the NASA/ESA Hubble Space Telescope as part of the Frontier Fields programme. *Credit: NASA, ESA, and J. Lotz (STScI).*

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