



Universiteit
Leiden
The Netherlands

Studying dark matter haloes with weak lensing

Velander, M.B.M.

Citation

Velander, M. B. M. (2012, June 20). *Studying dark matter haloes with weak lensing*. Retrieved from <https://hdl.handle.net/1887/19107>

Version: Corrected Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/19107>

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/19107> holds various files of this Leiden University dissertation.

Author: Velandar, Malin Barbro Margareta

Title: Studying dark matter haloes with weak lensing

Issue Date: 2012-06-20

Propositions

accompanying the thesis

Studying Dark Matter Haloes with Weak Lensing

1. Given enough space-based training data, the shape measurement bias due to the use of a broad-band filter when imaging galaxies with colour gradients can be mitigated.

Chapter 2

2. It is beneficial to employ weak gravitational flexion in addition to shear to constrain the density profiles of galaxy-sized dark matter haloes, given high-quality data.

Chapter 3

3. Blue late-type galaxies appear to reside in much less clustered environments than red early-type galaxies do.

Chapter 4

4. Weak gravitational flexion is a valuable complement to shear when it comes to constraining cluster halo masses.

Chapter 5

5. The main science drive for near-future weak lensing surveys should be shear analyses, with flexion as a gratifying extra.

6. There is a point where higher accuracy does not necessarily translate into scientific gain.

7. All published science results ought to be freely available and actively distributed.

8. Scientists should make an effort to decrease their carbon footprints, particularly since the current level of technology makes it possible.

9. When it comes to programming, readability, flexibility and clean code ultimately saves you more time than coding things up quickly does.

10. Equal opportunities necessitate amongst other things reasonable maternity leave schemes and affordable nursery options.

11. To reduce car traffic, public transport has to become not just a viable alternative but a superior one, both economically and in terms of convenience.

12. There is a higher concentration of intellectuals amongst ‘alternative’ people than otherwise. Or vice versa.

13. Small everyday luxuries result in greater and more lasting happiness than large infrequent splurges do.

14. Life-size papier-mâché cows should not be exiting elevators in the middle of the night.

— *Malin Velandar, 18 May 2012*