# Lensing galaxies in the CFHT Legacy Survey

Rafael Küng[1], Prasenjit Saha[1],
Elisabeth Baeten[2], Jonathan Coles[3], Claude Cornen[2], Christine Macmillan[2],
Phil Marshall[4], Anupreeta More[5], Surhud More[5], Aprajita Verma[6], Julianne K. Wilcox[2]

1) Physik-Institut, University of Zurich, Zurich, Switzerland
2) Zooniverse, c/o Astrophysics Department, University of Oxford, Oxford, UK
3) Exascale Research Computing Lab, Bruyeres-le-Chatel, France
4) Kavli Institute for Particle Astrophysics and Cosmology, Stanford University, Stanford, USA
5) Kavli Institute for the Physics and Mathematics of the Universe, University of Tokyo, Kashiwa-shi, Japan
6) Sub-department of Astrophysics, University of Oxford, Oxford, UK

SpaghettiLens

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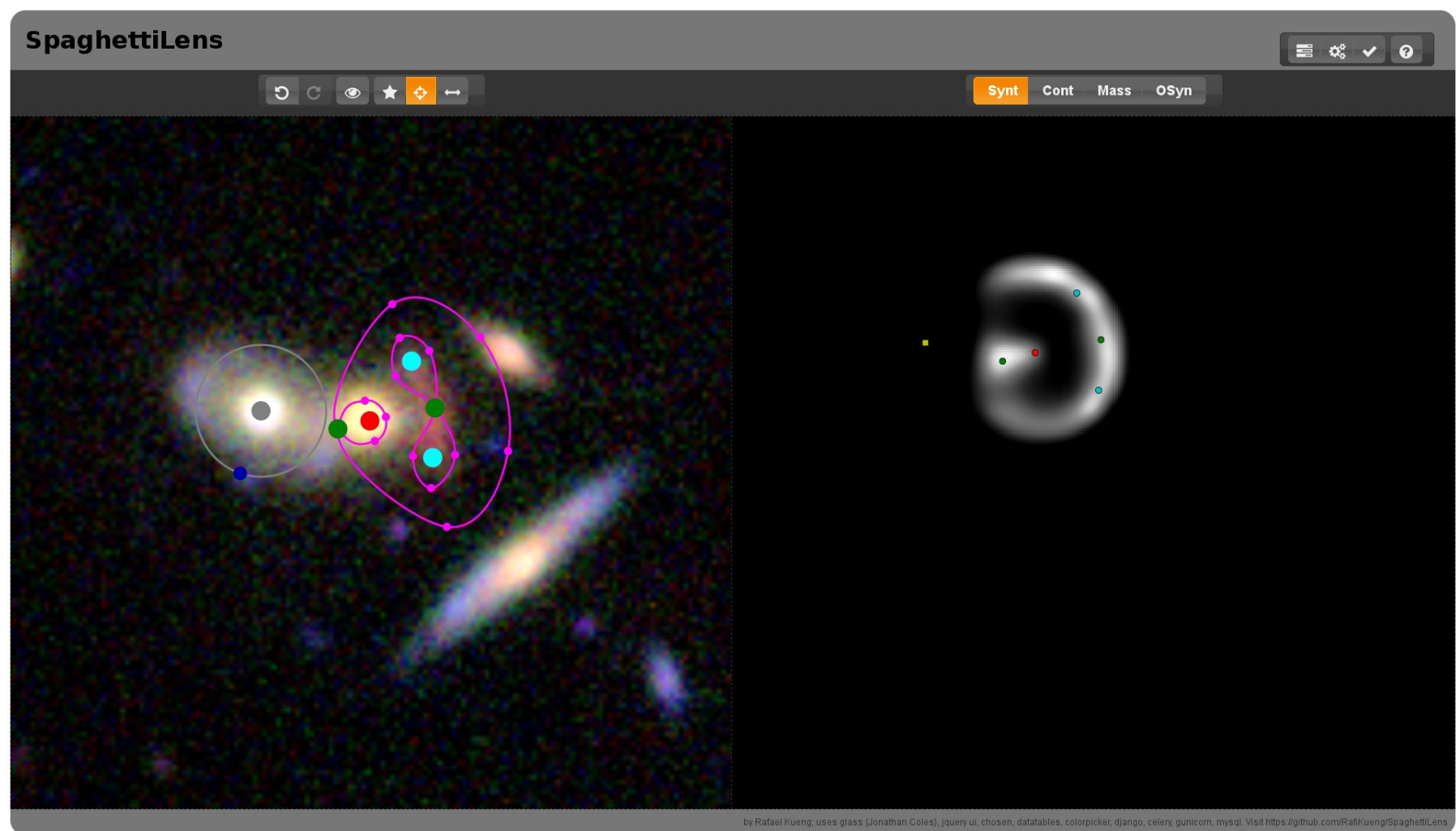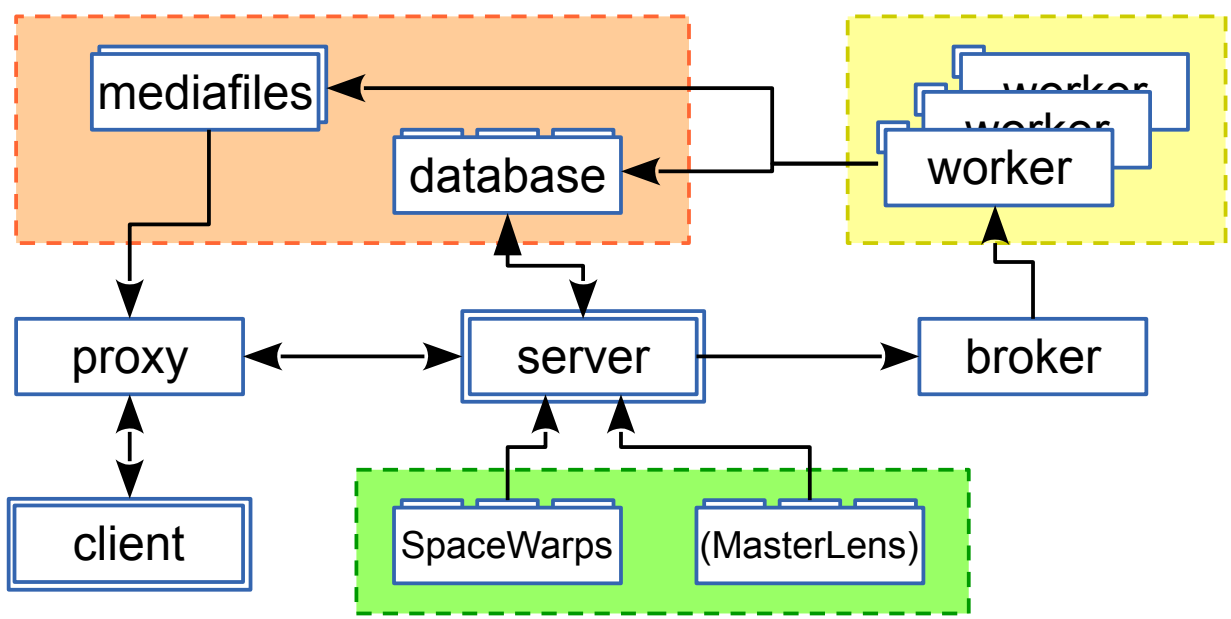
The Space Warps project enables citizen-science volunteers to search for gravitational-lens candidates by visual inspection of survey data. The first batch of discoveries consists of 56 new lens candidates from archival images of the CFHT Legacy Survey. In this work we present lens models of these candidates, produced collaboratively by experienced members of the volunteer community.

Preliminary results show the stellar-mass fraction in the candidate lensing galaxies to be of order 20 percent, with a decreasing trend for the most massive galaxies. Outliers may be non-lenses, as the sample has not yet been spectroscopically confirmed.

Space Warps and the CFHTLS lens candidates are introduced in Marshall et al 2015arXiv150406148M and More et al 2015arXiv150405587M
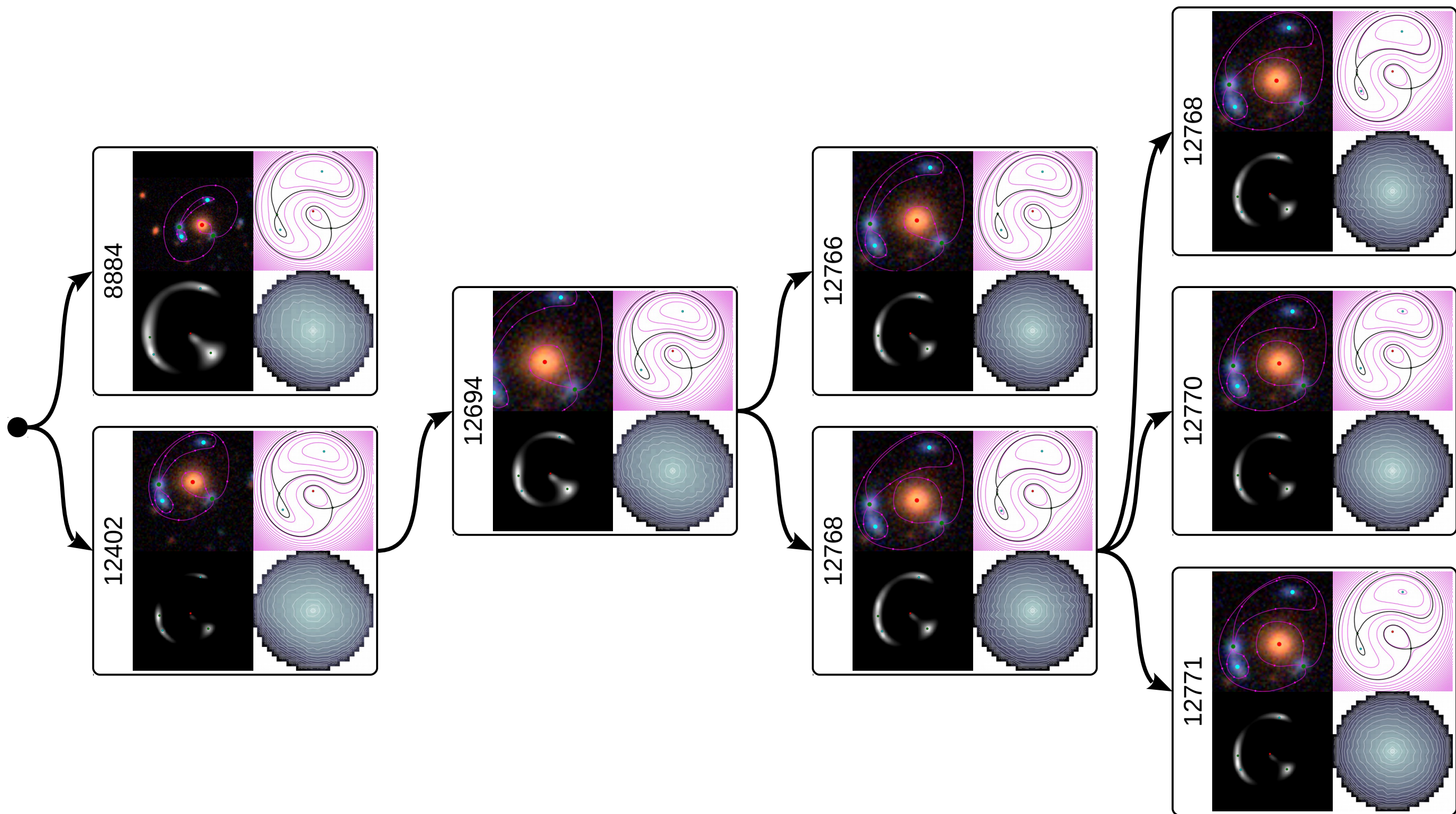
We thank Ignacio Ferreras for providing the stellar-population models used to estimate the stellar mass.
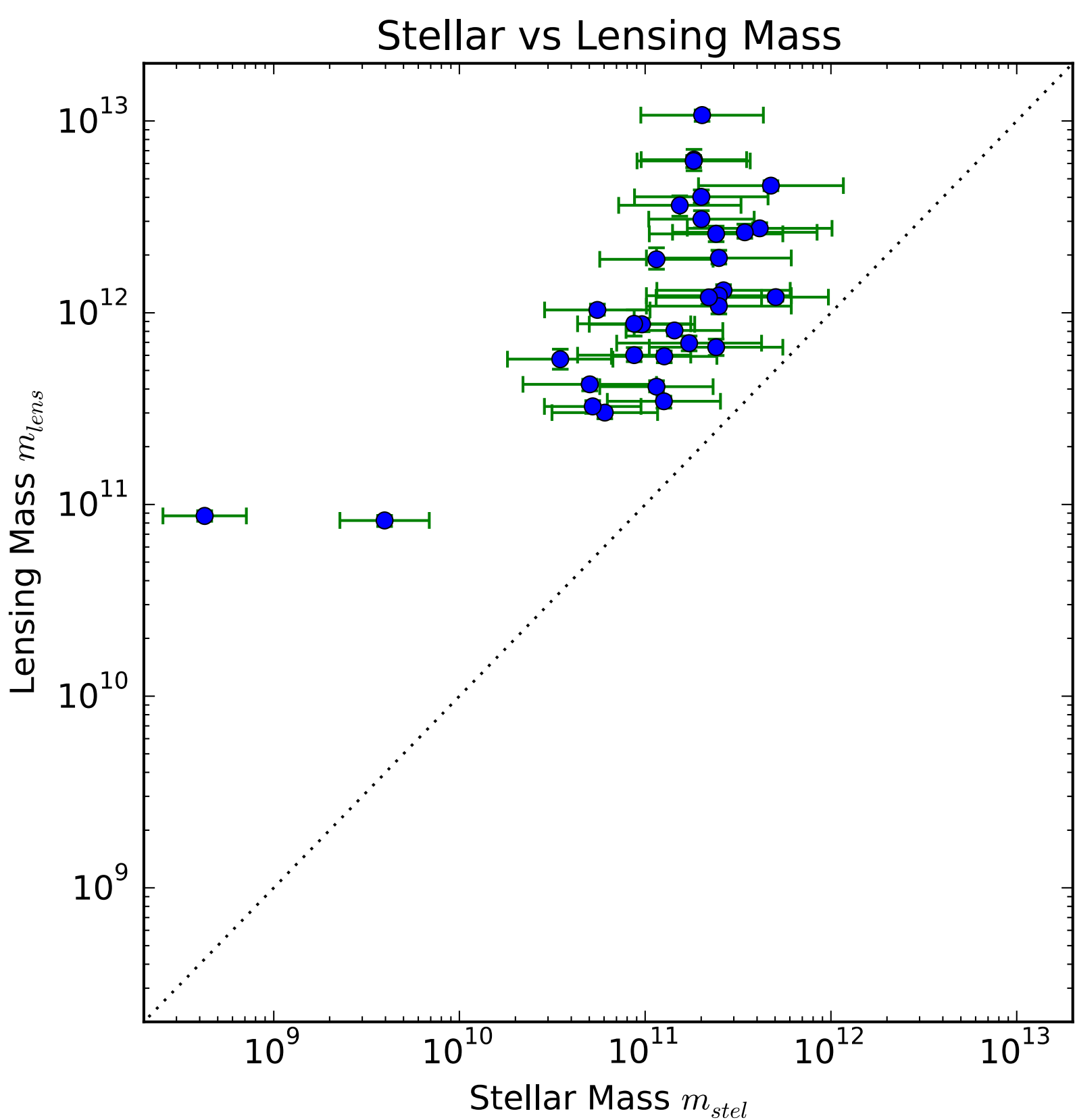
Collaborative Modelling

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For further details on collaborative modelling strategies, see http://letters.zooniverse.org on this topic.

Literature

Kueng et al.
Gravitational lens modelling in a citizen science context
2015, MNRAS, 447, 2170

Marshall et al.
Space Warps: I. Crowd-sourcing the Discovery of Gravitational Lenses
2015, ArXiv

More et al.
Space Warps II. New Gravitational Lens Candidates from the CFHTLS Discovered through Citizen Science
2015, ArXiv

Acknowledgement

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