Edward F. Schlafly
Curriculum Vitae

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ADDRESS: Max Planck Institut für Astronomie
Königstuhl 17
69117 Heidelberg, Germany

PERSONAL: Born 17 October, 1984, US citizen

EDUCATION: Ph.D., Physics, Harvard University, 2012
Dissertation: *Dust in Large Optical Surveys*, supervised by Doug Finkbeiner
B.S., Physics, Stanford University, 2007

POSITIONS:

August 2012 – present
Postdoctoral Researcher, Max Planck Institut für Astronomie
Supervisor: Hans-Walter Rix

August 2007 – July 2012
Ph.D. student, Physics, Harvard University
Advisor: Douglas P. Finkbeiner

September 2006 – May 2007
Research Assistant, Stanford University
Advisor: Roger W. Romani

RESEARCH INTERESTS:

- Interstellar dust, interstellar medium, bubbles
- Galactic structure, streams, dwarf galaxies
- Large astronomical data sets

AWARDS and FELLOWSHIPS:

- 2011 Harvard Graduate School of Arts and Sciences Merit Fellowship
- 2008 Harvard Physics Purcell Fellowship
- 2007 Jeff Willick Memorial Award (astronomy), Stanford Physics
- 2007 Sterling Award for Scholastic Achievement, Stanford University
- 2007 Departmental Honors, Stanford Physics

RESEARCH ADVISED:

(graduate)

2013— Nina Hernitschek (with H. W. Rix)

2012— Albert Lee (with D. P. Finkbeiner)

2010— Gregory Green (with D. P. Finkbeiner)

(undergraduate)

2014 Melih Ozcelik (with H. W. Rix)

TEACHING EXPERIENCE:

2009 Harvard Undergraduate Physics 15a (mechanics) lab teaching assistant

1999—2003 Aim High St. Louis Calligraphy Teacher (5 week summer school)

PUBLICATIONS (first author):

1. *3D Dust Mapping Reveals that Orion Forms Part of a Large Ring of Dust.* **E. F. Schlafly**, G. Green, D. P. Finkbeiner, et al., November 2014, accepted by ApJ.
2. *A Map of Dust Reddening to 4.5 kpc from Pan-STARRS1.* **E. F. Schlafly**, G. Green, D. P. Finkbeiner, et al., 2014, ApJ, 789, 15.
3. *A Large Catalog of Accurate Distances to Molecular Clouds from PS1 Photometry.* **E. F. Schlafly**, G. Green, D. P. Finkbeiner, et al., 2014, ApJ, 786, 29.
4. *Photometric Calibration of the First 1.5 Years of the Pan-STARRS1 Survey.* **E. F. Schlafly**, D. P. Finkbeiner, M. Juric, *et al*, 2012, ApJ, 756, 158. **49 citations**
5. *Measuring Reddening with SDSS Stellar Spectra and Recalibrating SFD.* **E. F. Schlafly**, D. P. Finkbeiner, 2011, ApJ, 737, 103. **522 citations**
6. *The Blue Tip of the Stellar Locus: Measuring Reddening with the SDSS.* **E. F. Schlafly**, D. P. Finkbeiner, D. J. Schlegel, et al., 2010, ApJ, 725, 1175. **52 citations**

PUBLICATIONS (2nd or 3rd author):

7. *Serendipitous discovery of a thin stellar stream near the Galactic bulge in the Pan-STARRS1 3pi Survey.* E. J. Bernard, A. M. N. Ferguson, **E. F. Schlafly**, et al., 2014, MNRAS, 443, 84.
8. *Galactic globular and open cluster fiducial sequences in the Pan-STARRS1 photometric system.* E. J. Bernard, A. M. N. Ferguson, **E. F. Schlafly**, et al., 2014, MNRAS, 442, 2999.
9. *The Complex Structure of Stars in the Outer Galactic Disk as Revealed by Pan-STARRS1.* C. T. Slater, E. Bell, **E. F. Schlafly**, et al., 2014, ApJ, 791, 9.

10. *Measuring Distances and Reddenings for a Billion Stars: Toward a 3D Dust Map from Pan-STARRS 1.* G. Green, **E. F. Schlafly**, D. P. Finkbeiner, et al., 2014, ApJ, 783, 114.

11. *Perseus I: A Distant Satellite Dwarf Galaxy of Andromeda.* N. F. Martin, **E. F. Schlafly**, C. T. Slater, et al., 2013, ApJL, 779, 10.

12. *Lacerta I and Cassiopeia III. Two Luminous and Distant Andromeda Satellite Dwarf Galaxies Found in the 3pi Pan-STARRS1 Survey.* N. F. Martin, C. T. Slater, **E. F. Schlafly**, et al., 2013, ApJ, 772, 15. **22 citations**

13. *The Pan-STARRS 1 Photometric Reference Ladder, Release 12.01.* E. A. Magnier, **E. F. Schlafly**, D. P. Finkbeiner, et al., 2013, ApJS, 205, 20. **24 citations**

14. *A Pan-STARRS1 View of the Bifurcated Sagittarius Stream.* C. T. Slater, E. F. Bell, **E. F. Schlafly**, et al., 2013, ApJ, 762, 6.

OTHER PUBLICATIONS:

15. *Systematic Uncertainties Associated with the Cosmological Analysis of the First Pan-STARRS1 Type Ia Supernova Sample.* D. Scolnic et al. [48 coauthors including **E. F. Schlafly**], 2014, ApJ, 795, 45.

16. *Cosmological Constraints from Measurements of Type Ia Supernovae Discovered during the First 1.5 yr of the Pan-STARRS1 Survey.* A. Rest et al. [48 coauthors including **E. F. Schlafly**], 2014, ApJ, 795, 44.

17. *A New Distant Milky Way Globular Cluster in the Pan-STARRS1 3pi Survey.* B. P. M. Laevens et al. [22 coauthors including **E. F. Schlafly**], 2014, ApJ, 786, L3.

18. *Measuring Quasar Variability with Pan-STARRS1 and SDSS.* E. Morganson et al. [13 coauthors including **E. F. Schlafly**], 2014, ApJ, 784, 92.

19. *Towards a complete stellar mass function of the Hyades. I. Pan-STARRS1 optical observations of the low-mass stellar content.* B. Goldman et al. [17 coauthors including **E. F. Schlafly**], 2013, A&A, 559, 43.

20. *Clustering of Sloan Digital Sky Survey III Photometric Luminous Galaxies: The Measurement, Systematics, and Cosmological Implications.* S. Ho et al. [39 coauthors including **E. F. Schlafly**], 2012, ApJ, 761, 14.

21. *The Milky Way Tomography with Sloan Digital Sky Survey. IV. Dissecting Dust.* M. Berry et al. [30 coauthors including **E. F. Schlafly**], 2012, ApJ, 757, 166.

22. *Ameliorating systematic uncertainties in the angular clustering of galaxies: a study using the SDSS-III.* A. J. Ross, et al. [31 coauthors including **E. F. Schlafly**], 2011,

MNRAS, 417, 1350.

23. *CGRaBS: An All-Sky Survey of Blazar Candidates.* S. E. Healey et al. [10 coauthors including **E. F. Schlafly**], 2008, ApJS, 175, 97.

SELECTED TALKS:

- "Dust with Gaia." *Astrophysical Calibration of Gaia*, 2014, Ringberg, Germany.
- "The Milky way's Dust and PS1." *Science Results from PS1*, 2014, STScI.
- "The Dust to 5 kpc from PS1." *AAS 223*, 2014, National Harbor, MD.
- "A Catalog of Distances to Molecular Clouds from PS1." Institute of Theoretical Astrophysics, 2013.
- "A Catalog of Distances to Molecular Clouds from PS1 Photometry." National Central University, Taiwan, 2013.
- "Mapping the Galaxy's Dust in 3D with PS1." Observatoire astronomique de Strasbourg, 2013.
- "Mapping the Galaxy's dust with PS1." University of Hawaii, 2013.
- "PS1 and BigBOSS." Institut Henri Poincaré, 2012.
- "3D Maps of the Galaxy's Dust." Durham University, 2012.
- "Photometric Calibration of the First 1.5 Years of the PS1 Survey." LBL, 2012.
- "Photometric Calibration of the First 1.5 Years of the PS1 Survey." Harvard, 2012.
- "Reconstructing the 3D Distribution of Dust and Stars with Pan-STARRS PS1." *The Interstellar Medium in Three Dimensions with Gaia*, 2011, Leiden.
- "Measuring Reddening with SDSS Stellar Spectra and Recalibrating SFD." *AAS 217*, 2011, Seattle.
- "The Blue Tip of the Stellar Locus: Measuring Reddening with the SDSS." *AAS 216*, 2010, Miami.
- "3D Dust with PS1 and Side of Calibration." Queen's University Belfast, 2010.
- "Measuring the Effect of Dust using the Blue Tip of the Stellar Locus." Harvard, 2009.