Douglas Finkbeiner Publications

INVITED REVIEWS

- "Microwave Emission from Aligned Dust,"
  A. Lazarian & **D. P. Finkbeiner** 2003, proceedings of "The Cosmic Microwave Background and its Polarization," New Astronomy Reviews, (eds. S. Hanany and K.A. Olive)

- "Interstellar Dust Emission as a CMBR Foreground,"
  D. P. Finkbeiner & D. J. Schlegel 1999 in "Microwave Foregrounds", eds. A. de Oliveira-Costa & M. Tegmark (ASP, San Francisco, 1999)

REFEREED PUBLICATIONS

ISM/Cosmology Research:

- "CMB and 21-cm Signals for Dark Matter with a Long-Lived Excited State,"
  D. P. Finkbeiner, N. Padmanabhan, & N. Weiner 2008, Phys. Rev. D, submitted, and arXiv:0805.3531

- "Identification of Spinning Dust in Halpha-correlated Microwave Emission,"
  G. Dobler & **D. P. Finkbeiner** 2007, ApJ, in press, and arXiv:0712.2238

- "Extended Anomalous Foreground Emission in the WMAP 3-Year Data,"
  G. Dobler & **D. P. Finkbeiner** 2007, ApJ, in press, and arXiv:0712.1038

- "Prospects for Detecting Dark Matter with GLAST in Light of the WMAP Haze,"
  D. Hooper, G. Zaharijas, **D. P. Finkbeiner**, & G. Dobler 2007, Phys. Rev. D, 77, 043511, and arXiv:0709.3114

- "Possible evidence for dark matter annihilations from the excess microwave emission around the center of the Galaxy seen by WMAP,"
  D. Hooper, **D. P. Finkbeiner**, & G. Dobler 2007, Phys. Rev. D, 76, 083012 and arXiv:0705.3655

- "Exciting Dark Matter and the INTEGRAL/SPI 511 keV signal,"
  D. P. Finkbeiner & Neal Weiner 2007, Phys. Rev. D, 76, 083519, and astro-ph/0702587

- "The effect of FIR emission from SDSS galaxies on the SFD Galactic extinction map,"
  Kazuhiro Yahata, et al. 2007, PASJ, 59, 205, and arXiv:astro-ph/0607098

- "Detecting Dark Matter Annihilation with CMB Polarization : Signatures and Experimental Prospects," N. Padmanabhan & **D. P. Finkbeiner** 2005,
  Phys. Rev. D, vol. 72, 023508, and astro-ph/0503486

- "Sloan Digital Sky Survey Imaging of Low Galactic Latitude Fields: Technical Summary and Data Release,"
  D. P. Finkbeiner, et al. 2004, AJ, 128, 2577, and astro-ph/0409700

- "Microwave ISM Emission in the Green Bank Galactic Plane Survey:
  Evidence for Spinning Dust,"
  D. P. Finkbeiner, G. I. Langston, & A. H. Minter 2004, ApJ, 617, 350, and astro-ph/0408292

- "Microwave ISM Emission Observed by *WMAP*,"
  D. P. Finkbeiner 2004, ApJ, 614, 186, and astro-ph/0311547

- "Determining Foreground Contamination in CMB Observations:
  Diffuse Galactic Emission in the MAXIMA-I Field,"
  A. H. Jaffe, et al. 2004, ApJ 615, 55

- "A Composite H-alpha Template for Microwave Foreground Prediction," **D. P. Finkbeiner** 2003, ApJS, 146, 407, and astro-ph/0301558
- "Tentative Detection of Electric Dipole Emission from Rapidly Rotating Dust Grains," **D. P. Finkbeiner**, D. J. Schlegel, Curtis Frank, & Carl Heiles 2002, ApJ, 566, 898
- "A New Spin on Galactic Dust," A. de Oliveira-Costa, M. Tegmark, **D. P. Finkbeiner**, R. D. Davies, C. M. Gutierrez, L. M. Haffner, A. W. Jones, A. N. Lasenby, R. Rebolo, R. J. Reynolds, S. L. Tufte, and R. A. Watson 2002, ApJ, 567, 363
- "Detection of a Far IR Excess with DIRBE at 60 and 100 Microns," **D. P. Finkbeiner**, Marc Davis, & D. J. Schlegel 2000, ApJ, 544, 81
- "Extrapolation of Galactic Dust Emission at 100 Microns to CMBR Frequencies Using FIRAS," **D. P. Finkbeiner**, Marc Davis, & D. J. Schlegel 1999, ApJ, 524, 867
- "Maps of Dust IR Emission for Use in Estimation of Reddening and CMBR Foregrounds," D. J. Schlegel, **D. P. Finkbeiner**, & Marc Davis 1998, ApJ, 500, 525
- "The Origin of the Galactic 1/4 keV Diffuse X-Ray Background," S. L. Snowden, R. Egger, **D. P. Finkbeiner**, M. J. Freyberg, P. P. Plucinksy, & W. T. Sanders 1998, ApJ, 493, 715
- "A Limit on Galactic Extinction Not Correlated with Far IR Emission," **D. P. Finkbeiner**, D. J. Schlegel, and Marc Davis, Proceedings of the Local Bubble and Beyond IAU Symp. 166. (1997)

DEEP2/DEIMOS Publications:

- "The DEEP2 Galaxy Redshift Survey: The Galaxy Luminosity Function to $z \sim 1$," Chris Willmer, et al. 2006, ApJ, 647, 853
- "The DEEP2 Galaxy Redshift Survey: the relationship between galaxy properties and environment at $z \sim 1$," Michael Cooper, et al. 2006, MNRAS, 370, 198
- "The DEEP2 Galaxy Redshift Survey: First results on galaxy groups" Brian F. Gerke et al. 2005, ApJ, 625, 6
- "The DEEP2 Galaxy Redshift Survey: Clustering of Galaxies in Early Data," Alison Coil, et al. 2004, ApJ, 609, 525
- "The DEEP2 Galaxy Redshift Survey: Spectral classification of galaxies at $z \sim 1$," Darren Madgwick, et al. 2003, ApJ, 599, 997

SDSS Publications:

- "Stellar SEDs from 0.3-2.5 Microns: Tracing the Stellar Locus and Searching for Color Outliers in SDSS and 2MASS," Kevin Covey, et al. 2007, AJ 134, 2398
- "Exploring the Variable Sky with the Sloan Digital Sky Survey," Branimir Sesar, et al. 2007, AJ, 134, 2236
- SDSS Publication 754: "An Improved Photometric Calibration of the Sloan Digital Sky Survey Imaging Data," Nikhil Padmanabhan, D. J. Schlegel, **D. P. Finkbeiner**, et al. 2008, ApJ, 674, 1217
- SDSS Publication 671: "Cosmological constraints from the SDSS luminous red galaxies," Max Tegmark, et al. 2006, Phys. Rev. D, 74, 123507

- SDSS Publication 479: "Panchromatic properties of 99000 galaxies detected by SDSS, and (some by) ROSAT, GALEX, 2MASS, IRAS, GB6, FIRST, NVSS and WENSS surveys," Mirela Obric, et al. 2006, MNRAS, 370, 1677
- SDSS Publication 350: "Variable Faint Optical Sources Discovered by Comparing the POSS and SDSS Catalogs," Branimir Sesar, et al. 2006, AJ, 131, 2801
- SDSS Publication 636: "The Clustering of Luminous Red Galaxies in the Sloan Digital Sky Survey Imaging Data", Nikhil Padmanabhan, et al. 2006, arXiv:astro-ph/0605302
- SDSS Publication 502: "SDSS J103913.70+533029.7: A Super Star Cluster in the Outskirts of a Galaxy Merger," Gillian Knapp, et al. 2006, AJ, 131, 859
- SDSS Publication 516: "The Sloan Digital Sky Survey monitor telescope pipeline," Douglas L. Tucker, et al. 2006, Astr. Nachrichten, 327, 821
- SDSS Publication 428: "Anomalously low PAH emission from low-luminosity galaxies," David W. Hogg, et al. 2005, ApJ, 624, 162
- SDSS Publication ???: "SDSS Data Management and Photometric Quality Assessment" Željko Ivezić, et al., Astr. Nachrichten, 325, 583
- SDSS Publication 424: "NYU-VAGC: a galaxy catalog based on new public surveys," Michael R. Blanton, et al. 2005, AJ, 129, 2562
- SDSS Publication 403: "The V1647 Ori (IRAS 05436-0007) Protostar and its Environment," Peregrine M. McGehee, et al. 2004, ApJ, 616, 1058
- SDSS Publication 310: "Cosmological parameters from SDSS and *WMAP*," Max Tegmark et al. 2004, Phys. Rev. D, 69, id. 103501
- SDSS Publication 234: "The 3D Power Spectrum of Galaxies from the SDSS," Max Tegmark, et al. 2004, ApJ, 606, 702
- SDSS Publication 289: "Near Infrared Photometry and Spectroscopy of L and T dwarfs: the Effects of Temperature, Clouds and Gravity," Gillian Knapp et al. 2004, AJ, 127, 3553
- SDSS Publication 177: "The Velocity Dispersion Function of Early-Type Galaxies," Ravi K. Sheth, et al. 2003, ApJ, 594, 225
- SDSS Publication 110a: "Early-Type Galaxies in the Sloan Digital Sky Survey. I. The Sample," Mariangela Bernardi, et al. 2003, AJ, 125, 1817
- SDSS Publication 110b: "Early-type Galaxies in the Sloan Digital Sky Survey. II. Correlations between Observables," Mariangela Bernardi, et al. 2003, AJ, 125, 1849
- SDSS Publication 110c: "Early-Type Galaxies in the Sloan Digital Sky Survey. III. The Fundamental Plane," Mariangela Bernardi, et al. 2003, AJ, 125, 1866
- SDSS Publication 110d: "Early-Type Galaxies in the Sloan Digital Sky Survey. IV. Colors and Chemical Evolution," Mariangela Bernardi, et al. 2003, AJ, 125, 1882
- SDSS Publication 183: "Average Spectra of Massive Galaxies in the SDSS," Daniel J. Eisenstein, et al. 2003, ApJ, 585, 694
- SDSS Publication 133: "Optical and Radio Properties of Extragalactic Sources Observed by the FIRST Survey and SDSS," Željko Ivezić, et al. 2002, AJ, 124, 2364

- SDSS Publication 95: "Galaxy Clustering in Early Sloan Digital Sky Survey Redshift Data," Idit Zehavi, et al. 2002, ApJ, 571, 172
- SDSS Publication 82: "A Photometricity and Extinction Monitor at the Apache Point Observatory," David W. Hogg, **D. P. Finkbeiner**, David Schlegel & James E. Gunn, 2001, AJ, 122, 2129, astro-ph/0106511
- SDSS Publication 73: "Composite Quasar Spectra from the SDSS"
  Daniel Vanden Berk, et al. 2001, AJ, 122, 549
- SDSS Publication 55: "Colors of 2625 Quasars at $0 < z < 5$ Measured in the Sloan Digital Sky Survey Photometric System," Gordon T. Richards, et al. 2001, AJ, 121, 2308
- SDSS Publication 54: "The Luminosity Function of Galaxies in SDSS Commissioning Data," Michael Blanton, et al. 2001, AJ, 121, 2358
- Plus six SDSS data release papers

POPULAR PRESS

- Scientific American – "The Not-So-Dark matter: How dark matter might emit detectable energy" by George Musser, April 2007
- Astronomy Magazine – "A hazy view of dark matter," 24 October 2004 (web site[1])
- New Scientist – "Milky Way's radiation shows up a dark centre," October 2004, 16, p. 11
- Scientific American – "Swirling dust," January 2002, p. 23
- The Economist – "Interstellar dust: Spinning around," 17 November 2001, p. 74
- New Scientist – "Piercing the haze," 17 November 2001, p. 11

[1] `http://www.astronomy.com/default.aspx?c=a&id=2542`

RECENT INVITED TALKS

- 4/2005 – NRAO Socorro: Dark Matter Annihilation
- 4/2005 – Harvard University: Dark Matter Annihilation
- 3/2005 – University of Washington: Dark Matter Annihilation
- 2/2005 – University of Chicago: Dark Matter Annihilation
- 1/2005 – University of Michigan: Dark Matter Annihilation
- 1/2005 – Caltech: Dark Matter Annihilation
- 1/2005 – AAS San Diego: Dark Matter Annihilation
- 12/2004 – UC Merced Colloquium: Dark Matter Annihilation
- 12/2004 – NYU Colloquium: Dark Matter Annihilation
- 9/2004 – Identification of Dark Matter 2004, Edinburgh: Annihilating dark matter
- 8/2004 – Arecibo, Heiles symposium: Spinning Dust
- 5/2004 – AAS meeting, Denver: Galactic structure with SDSS
- 4/2004 – Cornell University Colloquium: Spinning Dust
- 4/2004 – University of Minnesota Colloquium: Spinning Dust
- 3/2004 – SDSS meeting, Las Cruces: Calibrating the SDSS
- 2/2004 – UC Santa Barbara: Spinning Dust and *WMAP*
- 2/2004 – MIT: Spinning Dust and *WMAP*
- 2/2004 – Yale: Spinning Dust and *WMAP*
- 1/2004 – University of Pennsylvania: Spinning Dust and *WMAP*
- 1/2004 – UC Berkeley: Spinning Dust and *WMAP*
- 12/2003 – University of Michigan: Spinning Dust and *WMAP*
- 12/2003 – Columbia University: Spinning Dust and *WMAP*
- 11/2003 – Princeton Society of Fellows: Kuhn and astronomy
- 10/2003 – U. Chicago Colloquium: Spinning Dust (Green Bank / *WMAP*)
- 10/2003 – Kavli/CERCA (Case Western) meeting (attending)
- 9/2003 – Princeton ISM seminar: Spinning Dust, SDSS
- 6/2003 – BU Astro Conf., Boston, MA: Spinning Dust
- 5/2003 – Astrophysics of Dust, Estes Park, CO: Spinning Dust
- 4/2003 – SDSS meeting, Flagstaff, AZ: Dust with SDSS
- 2/2003 – TAC seminar, Berkeley: Spinning Dust and *WMAP*
- 1/2003 – AAS meeting, Seattle: Spinning Dust at Green Bank
- 11/2002 – Princeton ISM seminar: Spinning Dust at Green Bank
- 10/2002 – Penn Colloquium: Measuring Dust with SDSS
- 10/2002 – Hawaii IfA: Measuring Dust with SDSS
- 7/2002 – SDSS meeting, Princeton: 3-D Dust distribution
- 6/2002 – Oort Symposium, Leiden: H-alpha survey / DEEP2 survey
- 5/2002 – Green Bank Colloquium: Spinning Dust and the GBT
- 10/2001 – SDSS meeting, Kyoto, Japan: Dust and SDSS
- 8/2001 – U. Arizona Seminar: Cosmic IR Background
- 5/2001 – U. Michigan Colloquium: Cosmic IR Background
- 3/2001 – Harvard CfA OIR talk: Dust and SDSS