

Joel R. Primack

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Education: Princeton University A.B. 1966 Physics (Summa cum Laude)
Stanford University PhD 1970 Physics

Academic Positions: Junior Fellow, Society of Fellows, Harvard University 1970-73
Assistant Professor of Physics, UCSC 1973-1977; Associate Professor of Physics, UCSC,
1977-1983; Professor of Physics, UCSC 1983-present; Distinguished Professor 2007-
Director, University of California systemwide High-Performance Astro-Computing
Center, 2010-; Chair, UCSC Committee on Computing and Telecommunications, 2008-
2011; Chair, University Committee on Computing and Communications, 2010-11

Advice (partial list): SAGENAP advisory panel to DOE/NSF 2000-2001; NSF
Astronomy Theory Review Panel 2000; DOE Lehman Review of SNAP Proposal 2001;
Chair, NASA Cosmology panel on LTSA and ADP 2001; Cosmology Panel, Hubble
Space Telescope Time Allocation Committee 2003; Editorial Board, Journal of
Cosmology and Astroparticle Physics 2003-06; National Academy Beyond Einstein
panel, 2006-07.

American Physical Society activities (partial list): Executive Committee, APS Division
of Astrophysics, 2000-2002; APS Panel on Public Affairs (POPA) 2002-2004; Chair,
POPA Task Force on Moon-Mars Program and Funding for Astrophysics 2004; Chair,
APS Forum on Physics and Society 2005; Chair, APS Sakharov Prize committee 2009

Outreach (partial list): Smithsonian National Air and Space Museum, Advisory
Committee on *Cosmic Voyage* IMAX film, 1994-1996. Co-organizer, “Cosmic
Questions” Conference, Smithsonian National Museum of Natural History, Washington,
DC, April 14-16, 1999. Co-author of popular book *The View from the Center of the
Universe* (2006). Over 100 public lectures on cosmology, including Sackler Lecture (UC
Berkeley, 2006); J. Robert Oppenheimer Memorial Lecture (Los Alamos, 2007); APS
Public Lecture (St. Louis, 2008); Terry Lectures (with Nancy Abrams, Yale, 2009)

Honors (partial list): A. P. Sloan Foundation Research Fellowship, 1974-1978
American Physical Society Forum on Physics and Society Award, 1977; Fellow, 1988
American Association for the Advancement of Science, Fellow, 1995
Humboldt Senior Award of the Alexander von Humboldt Foundation, 1999-2004

Books

- Joel R. Primack and Frank von Hippel, *Advice and Dissent: Scientists in the Political Arena* (New York: Basic Books, 1974; New American Library, 1976)
- Joel R. Primack and Nancy Ellen Abrams, *The View from the Center of the Universe: Discovering Our Extraordinary Place in the Cosmos* (New York: Riverhead/Penguin, 2006; London: HarperCollins, 2006; Paris: Laffont, 2008; and other foreign editions)

Selected peer-reviewed publications (in chronological order)

Supersymmetry, cosmology, and new physics at teraelectronvolt energies 1982, *Phys. Rev. Letters* **48**, 223. Pagels, Heinz, and **Primack, Joel R.** (334 citations in *NASA Astrophysics Data System*)

Formation of galaxies and large-scale structure with cold dark matter 1984, *Nature* **311**, 517. Blumenthal, G. R.; Faber, S. M.; **Primack, J. R.**; Rees, M. J. (849 ADS cites)

Contraction of dark matter galactic halos due to baryonic infall 1986, *ApJ* **301**, 27. Blumenthal, G. R.; Faber, S. M.; Flores, R.; **Primack, J. R.** (517 ADS)

Dynamical effects of the cosmological constant 1991, *MNRAS* **251**, 128. Lahav, Ofer; Lilje, Per B.; **Primack, Joel R.**; Rees, Martin J. (379 ADS)

Semi-analytic modeling of galaxy formation: the local Universe 1999, *MNRAS* **310**, 1087. Somerville, Rachel S.; **Primack, Joel R.** (613 ADS) *

The nature of high-redshift galaxies 2001, *MNRAS* **320**, 504. Somerville, Rachel S.; **Primack, Joel R.**; Faber, S. M. (449 ADS) *

Profiles of dark haloes: evolution, scatter and environment 2001, *MNRAS* **321**, 559. Bullock, J. S.; Kolatt, T. S.; Sigad, Y.; Somerville, R. S.; Kravtsov, A. V.; Klypin, A. A.; **Primack, J. R.**; Dekel, A. (1052 ADS) *

Concentrations of dark halos from their assembly histories 2002, *ApJ* **568**, 52. Wechsler, R. H., Bullock, J. S., Primack, J. R., Kravtsov, A. V., Dekel, A. (403 ADS) *

A New Non-Parametric Approach to Galaxy Morphological Classification 2004, *AJ*, 128, 163-182. Jennifer M. Lotz, **Joel Primack**, and Piero Madau (124 ADS)

Feedback in Simulations of Disk Galaxy Major Mergers 2006, *MNRAS*, 373, 1013. T. J. Cox, Patrik Jonsson, **Joel R. Primack**, and Rachel S. Somerville (114 ADS) *

Simulations of Dust in Interacting Galaxies I: Dust Attenuation 2006, *ApJ*, 637, 255. Patrik Jonsson, T. J. Cox, **Joel R. Primack**, Rachel S. Somerville *

Predicting the Properties of the Remnants of Dissipative Galaxy Mergers 2008, *MNRAS*, 384, 94. M. Covington, A. Dekel, T. J. Cox, P. Jonsson, and **J. R. Primack** *

The effect of galaxy mass ratio on merger-driven starbursts 2008, *MNRAS*, 384, 386. T. J. Cox, P. Jonsson, R. S. Somerville, **J. R. Primack**, A. Dekel

GeV Gamma-Ray Attenuation and the High-Redshift UV Background 2009, *MNRAS*, in press, R.C. Gilmore, P. Madau, **J. R. Primack**, R. S. Somerville, F. Haardt *

* These papers are based on PhD dissertation research supervised by **Joel Primack**