## **Biography of Nancy Ellen Abrams**

Nancy Ellen Abrams has a degree in the history and philosophy of science from the University of Chicago and a law degree from the University of Michigan. She was a Fulbright Scholar and a Woodrow Wilson Designate. She is a writer whose work has appeared in journals, magazines, and books, and a songwriter who has performed at conferences, concerts, and events in seventeen countries, released three albums, and been featured on National Public Radio and television. With her husband, world-renowned cosmologist Joel R. Primack, she co-authored a prizewinning article on quantum cosmology and Kabbalah, as well as numerous articles on science policy, space policy, and possible cultural implications of modern cosmology. Her song lyrics were used as chapter headings in the book *Powerline* by the late Senator Paul Wellstone. New York Times science writer Dennis Overbye's bestseller, Lonely Hearts of the Cosmos, includes a photo of her with Joel, describes Nancy's songs, and closes with the complete lyrics to a song she wrote for and performed at an astronomy conference. Together Nancy and Joel developed the award-winning course "Cosmology and Culture" and have been co-teaching it since 1996 at the University of California, Santa Cruz. Several songs on Nancy's 2002 album Alien Wisdom explore themes of cosmology and culture (see her music website, www.expandinguniverse.org). She has been intrigued by science's border with myth since studying with Mircea Eliade at the University of Chicago. She works as a scholar to put the discoveries of modern cosmology into a cultural context and as a writer and musician to communicate their possible meanings at deeper level.

Nancy has also had a long-term interest in the role of science in shaping a new politics. She has worked in this area for an international law firm, a European environmental think tank, the Ford Foundation, and the Office of Technology Assessment of the U.S. Congress. She co-created the technique of Scientific Mediation, which permits government agencies to make informed and foresightful policy decisions in areas where science is crucial but disputed. Scientific Mediation aims not to resolve scientific controversy, which can only be done by scientific research, but to make the essence of the disputed issue transparent to the non-scientists making the practical political decision. She has consulted on the use of this novel procedure for Sweden, the state governments of California and Wisconsin, Exxon Nuclear, and others, and Scientific Mediation has become standard procedure in the Swedish Department of Industry.