
Volker Bromm

Born December 12, 1967, Kiel, Germany.

Academic Positions

Since-2004 Assistant Professor, University of Texas at Austin

04-10/2004 Institute Fellow, Space Telescope Science Institute

2001–2004 Postdoctoral Scholar, Harvard University

2000–2001 Postdoctoral Scholar, Institute of Astronomy, Cambridge University.

Professional Preparation

1994–2000 Yale University, New Haven, Connecticut. Degree: Ph.D. in Astronomy (2000).

1990–1993 University of Heidelberg, Germany. Degree: M.Sc. in Physics (1993).

1987–1990 University of Kiel, Germany. Degree: B.Sc. in Physics and Mathematics (1990).

Graduate Advisors: Prof. Paolo S. Coppi and Prof. Richard B. Larson.

Awards and Honors

2004–2008 Numerous invited review talks on The First Stars.

2004 STScI Institute Fellowship.

2004 Invited review talk: “First Stars”, 203rd AAS meeting, Atlanta.

2003 Northeastern Association of Graduate Schools Dissertation Award.

2002 Robert J. Trumpler Award, Astronomical Society of the Pacific.

Recent Collaborators: Matthew Bate (Univ. of Exeter, UK), Ian Bonnell (St. Andrews Univ., UK), Cathie Clarke (Cambridge Univ., UK), Paolo Coppi (Yale), Andrea Ferrara (SISSA, Italy), Lars Hernquist (Harvard), Marc Kamionkowski (Caltech), Rolf-Peter Kudritzki (Univ. of Hawaii), Richard Larson (Yale), Abraham Loeb (Harvard), Kazu Omukai (NAO, Japan), Ruben Salvaterra (SISSA, Italy), Mike Santos (STScI), Raffaella Schneider (Arcetri, Italy), Paul Shapiro (UT Austin), Naoki Yoshida (Nagoya Univ., Japan)

Synergistic Activities

Referee for ApJ, A&A, MNRAS, PASJ, Space Science Reviews, Science, Nature

Graduate Adviser, Astronomy Department, University of Texas at Austin

Member SOC: Ringberg 2005, Bash Symposium 2006, Chamonix 2007, IAU Symposium 254

Selected Publications

I. On the First Stars and Galaxies

Forming the First Stars in the Universe: The Fragmentation of Primordial Gas, Bromm, V., Coppi, P. S., & Larson, R. B. 1999, ApJ, **527**, L5. (209 citations)

The Fragmentation of Pre-enriched Primordial Objects, Bromm, V., Ferrara, A., Coppi, P. S., & Larson, R. B. 2001, MNRAS, **328**, 969. (121 citations)

Generic Spectrum and Ionization Efficiency of a Heavy Initial Mass Function for the First Stars, Bromm, V., Kudritzki, R. P., & Loeb, A. 2001, ApJ, **552**, 464. (154 citations)

The Formation of the First Stars: The Primordial Star-forming Cloud, Bromm, V., Coppi, P. S., & Larson, R. B. 2002, ApJ, **564**, 23. (220 citations)

The First Stars, Bromm, V., & Larson, R. B. 2004, ARA&A, **42**, 79. (80 citations)

II. In Other Fields

The Formation Mechanism of Brown Dwarfs, Bate, M. R., Bonnell, I. A., & Bromm, V. 2002, MNRAS, **332**, L65. (129 citations)

The Expected Redshift Distribution of Gamma-Ray Bursts, Bromm, V., & Loeb, A. 2002, ApJ, **575**, 111. (69 citations)

The Contribution of the First Stars to the Cosmic Infrared Background, Santos, M. R., Bromm, V., & Kamionkowski, M. 2002, MNRAS, **336**, 1082. (54 citations)

The Formation of a Star Cluster, Bate, M. R., Bonnell, I. A., & Bromm, V. 2003, MNRAS, **339**, 577. (145 citations)

Formation of the First Supermassive Black Holes, Bromm, V., & Loeb, A. 2003, Ap. J., **596**, 34. (50 citations)