
DAVID HOLLENBACH - NASA AMES RESEARCH CENTER

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Related Experience Summary

Principal Investigator of the Center for Star Formation Studies 1985-2003.

Principal Investigator and Co-Investigator on numerous theoretical grants concerning the evolution of the interstellar medium, star formation, interstellar and protoplanetary dust, and the evolution of protostellar disks.

Significant involvement in a number of space missions which studied or are going to study the interstellar medium and star formation, including KAO, SWAS, ISO, Spitzer, and SOFIA. The most relevant is Co-Investigator on the Spitzer Legacy Program "Formation and Evolution of Planetary Systems."

Employment History

1980-Present Research Scientist, Space Science Division, NASA-Ames Research Center

1979-1980 National Research Council Associate, NASA-Ames

1975-1979 Research Scientist, University of California at Berkeley

Education

A.B. Hope College, 1964; PhD. (Theoretical Physics), Cornell University, 1969; postdoctoral fellow, Harvard University (astronomy) 1969-1971

Professional Societies

Member, American Astronomical Society and International Astronomical Union, 1979-present

Awards and Honors

Woodrow Wilson Fellow, Danforth Fellow, National Science Foundation Graduate Fellow, Ames Associate Fellow (1991-1992), H. Julian Allen Award (NASA Ames 1992, 2003), Exceptional Scientist Award (NASA 1995), Outstanding Leadership Award (NASA 2002), Exceptional Achievement Award (NASA 2005)

Selected Relevant Publications

Hollenbach, D., Johnstone, D., Lizano, S., and Shu, F. "Photoevaporation of Disks Around Massive Stars and Application to Ultracompact H II Regions", *ApJ*, 428, 654, 1994.

Johnstone, D., Hollenbach, D., Bally, J., "Photoevaporation of Disks and Clumps by Nearby Massive Stars: Application to Disk Destruction in the Orion Nebula", *ApJ*, 499, 758, 1998.

Stoerzer, H. and Hollenbach, D., "PDR Models of Photoevaporating Circumstellar Disks and Application to the Proplyds in Orion", *ApJ*, 515, 669, 1999.

Hollenbach, D., Yorke, H., and Johnstone, D., "Disk Dispersal Around Young Stars", in *Protostars and Planets IV*, eds. V. Mannings, A. Boss, S. Russell, (University of Arizona Press: Tucson), p401, 2000.

Gorti, U & Hollenbach, D. "Models of Chemistry, Thermal Balance, and Infrared Spectra from Intermediate-Aged Disks around G and K Stars", *ApJ*, 613, 424, 2004

Adams, F., Hollenbach, D., Laughlin, G., Gorti, U. "Photoevaporation of Circumstellar Disks Due to External FUV Radiation in Stellar Aggregates", *ApJ*, 611, 360, 2004,

Hollenbach, D., Gorti, U. et al. "Formation and Evolution of Planetary Systems: Upper Limits to the Gas Mass in HD 105", *ApJ*, 631, 1180, 2005.

Richling, S., Hollenbach, D., Yorke, H. "Destruction of Protoplanetary Disks by Photoevaporation", in *Planet Formation*, ed. H. Klahr & W. Brandner (Cambridge University Press: Cambridge), p.38, 2006.

Dullemond, C., Hollenbach, D. Kamp, I., d'Alessio, P. "Models of the Structure and Evolution of Protoplanetary Disks", in *Protostars and Planets V*, eds. B. Reipurth et al, (U. Arizona press:Tucson), p555, 2007

Gorti, U. and Hollenbach, D. "Line Emission from Gas in Optically Thick Dust Disks around Young Stars", *ApJ*. submitted, 2008.
