

DAVID J. BATUSKI

Professor

Department of Physics & Astronomy

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EDUCATION

1970 B.S. Engineering Sciences, United States Air Force Academy

1971 M.S. Astronautical Engineering, Purdue University

1986 Ph.D. Physics, University of New Mexico

Thesis Title: "Abell Clusters as Tracers of Large-Scale Structure in the Universe"

PROFESSIONAL EXPERIENCE (34 years of service to UMaine)

2001 – Present Professor

2015 – 2016 Interim Department Chair

2003 – 2014 Department Chair

1994 – 2001 Associate Professor

1988 – 1994 Assistant Professor

1986 – 1988 Research Associate, Space Telescope Science Institute, Baltimore, Maryland

1980 – 1986 Graduate Student and Research/Teaching Assistant
University of New Mexico

1970 -- 1979 Lieutenant, then Captain, United States Air Force

1976 – 1979 Project Officer, High Energy Laser Beam-Control Systems,
Air Force Weapons Laboratory, Albuquerque, New Mexico,

1971 – 1976 Space Vehicle Engineer and Program Manager
Launch Vehicle Program Office, Air Force Space and Missile
Systems Organization, El Segundo, California

PROFESSIONAL SOCIETIES

American Astronomical Society, American Association for the Advancement of Science,
Astronomical Society of the Pacific, Society of Physics Students and Sigma Pi Sigma

HONORS AND AWARDS

1970 Distinguished Graduate, USAF Academy

1982-1983 University of New Mexico Dept. of Physics & Astronomy Fellowship

1984 University of New Mexico Graduate Scholarship

1985-1986 Sigma Xi award for Outstanding Dissertation in Science at University
of New Mexico

1985-1988 Thomas L. Popejoy Prize for Outstanding Dissertation in
Sciences/Engineering at University of New Mexico

1998, 1995,

1993, 1991,

And 1989

1999

Visiting Astronomer at Meudon Observatory, France

Member of Phi Kappa Phi Honor Society, University of Maine Chapter
(Chapter President 2004 - 2006, Chapter Vice President 2002 - 2004)

RECENT PRINCIPAL PUBLICATIONS

“Locating Bound Structure in an Accelerating Universe,” 2013, Pearson, D., Batuski, D. J., Monthly Notices of the Royal Astronomical Society Vol. 436, p. 796-806.

“A dynamical analysis of the Corona Borealis Supercluster,” 2013, Batiste, M., Batuski, D. J., Monthly Notices of the Royal Astronomical Society Vol. 436, p. 3331-3340.

“The largest gravitationally bound structures: the Corona Borealis supercluster - mass and bound extent,” 2014, Pearson, D., Batiste, M., Batuski, D. J., Monthly Notices of the Royal Astronomical Society, Vol. 441, p. 1606-1614.

“A Direct Examination of College Student Misconceptions in Astronomy. I. The New Instrument” 2014, Favia, A., Comins, N., Thorpe, G., Batuski, D. in Journal and Review of Astronomy Education and Outreach, Volume 1.

“Taking on astronomy misconceptions isn’t easy,” 2016. Favia, A., Comins, N., Batuski, D., in Physics Today, August 2016, p. 74.

RECENT AND CURRENT GRADUATE STUDENT RESEARCH

Alex Koch, Ph.D. Thesis, defended July 2021: “Application of Machine Learning Techniques to Classify and Identify Galaxy Merger Events in the CANDELS Fields”

Logan Hess, M. S. Thesis, defended July 2021: “Luminosity Functions of Galaxy Clusters in the Aquarius and Microscopium Superclusters”

Sarah Rice, Ph.D. Thesis project: “Probing Dark Matter Distribution via Weak Lensing in Extremely Overdense Supercluster Environments”

Nikita Saini, Ph.D. Thesis project: “Investigation of Planetary Properties in Multiplanetary Systems in Absence/Presence of Jupiter-Sized Planets”

Peter Manzella, Ph.D. Thesis project: “Angular Momentum and Magnetic Field Interactions with Failed Supernovae”

Brenda Jones, Ph.D. Thesis project in development.