## Curriculum Vitae - James McLellan Stone

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# **Academic Appointments**

Professor, Institute for Advanced Study, 2019-present

Professor Emeritus, Princeton University, 2019-present

Lyman Spitzer, Jr. Chair of Theoretical Astrophysics, PU, 2016-2019

Professor, Department of Astrophysical Sciences, PU, 2003-2019

Professor, Program in Applied and Computational Mathematics (PACM), PU, 2003-2019

Professor of Mathematical Physics (1978), University of Cambridge, England, 2002-2003

Professor of Astronomy, University of Maryland, 2001-2003 (on leave 2002-2003)

Associate Professor of Astronomy, University of Maryland, 1997-2001

Assistant Professor of Astronomy, University of Maryland, 1991-1997 (on leave 1991)

# Other Appointments

Chair, Department of Astrophysical Sciences, Princeton University, 2016-2019

Associate Director, then Director, Princeton Inst. of Comp. Sci. & Engineering, 2009-2017

Director, Fund for Canadian Studies, PU, 2014-2016

Associate Chair, Department of Astrophysical Sciences, PU, 2007-2009

Associate Director, Appl. Maths & Sci. Computation graduate program, UMd, 2001-2002

Senior Visiting Fellow, Institute of Astronomy, University of Cambridge, England, 1998-1999

### Professional Preparation

BSc. (Hons) Queen's University, Kingston, Canada 1984

M.Sc. Queen's University, Kingston, Canada 1986

Ph.D. University of Illinois 1990, Thesis: "Numerical Simulations of Protostellar Mass Outflows", Dimitri Mihalas and Michael L. Norman, thesis advisors

NSF Postdoctoral Research Associate, Nat. Center for Supercomputing Apps., UIUC, 1990-1992

### Honors

2020 Member, American Academy of Arts and Sciences

2019 Inaugural Fellow of American Astronomical Society

2019 Kavli Lecturer, University of Cambridge

2018 Dirk Brouwer Career Award, American Astronomical Society

2013 Fellow of American Physical Society

2011 Aneesur Rahman Prize for Computational Physics, American Physical Society

1995 Graduate Research Board Award, University of Maryland

NSF Prize Postdoctoral Fellowship, 1990-1992

# Research Interests

Star formation, accretion flows, interstellar gas dynamics. Numerical algorithms for magnetohydrodynamics, radiation hydrodynamics.

#### **Professional Societies**

American Astronomical Society American Physical Society International Astronomical Union

### **Professional Service**

Member, Panel on Enabling Foundations, 2020 Decadal Survey, National Academy of Sciences Member, Committee on Astronomy and Astrophysics, National Academy of Sciences, 2014-2018 Scientific Advisory Board for New Astronomy, 2000 present

Scientific Advisory Board for *New Astronomy*, 2009-present Steering Committee, KITP, UC Santa Barbara, 2005-2008

Committee to Review Impact of Computation on Four Fields of Science, NAS, 2007-2008

External Review Panel, Canadian Institute for Theoretical Astrophysics, 2002 and 2007

Plasma Science Committee, National Academy of Sciences, 2001-2002

National Resource Allocation Committee, NSF Supercomputer Ctrs., 1999-2002

Time Allocation Committee, Cornell Theory Center, 1994-1997

NSF Supercomputer Centers, Metacenter Allocation Committee, 1996-1997

Member, external departmental review committees for Departments of Astronomy at U. Virginia (2009), and Harvard (2011)

Member, Scientific Organizing Committee for 35+ international conferences.

External examiner, Ph.D. thesis committees at U. Delaware, U. Virginia, U. Maryland, Trinity College Dublin, University of Cambridge, University of Paris, University of Oulu (Finland), McMaster University, Australian National University, & Goethe University Frankfurt

Panel and external reviewer for NSF, NASA, DOE, NSERC (Canada), STFC (UK), DFG & MPS (Germany), European Research Council, Research Foundation Flanders (Belguim)

Referee for Ap.J., A.&A., MNRAS, New Ast., Nature, J.Comp.Phys., & Phys. of Plasmas