

MONICA VALLURI – CURRICULUM VITAE

University of Michigan
Department of Astronomy
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EDUCATION

- Integrated BS. & MS. Physics:** Birla Institute of Technology and Science, Pilani, India, 1983-1987
Ph.D. Astrophysics: Indian Institute of Science, Bangalore, India, (December 1993), Advisor: Chanda J. Jog

CURRENT RESEARCH AREAS

- Accurately measuring the masses of supermassive black holes from stellar dynamics, especially in active “reverberation mapping” and barred galaxies.
- Understanding the properties of rotating triaxial systems and barred galaxies with supermassive black holes (SMBH) and the effects of bars on the growth of SMBH and the structure of galactic nuclei.
- Characterizing the shapes and orbital structure of dark matter halos, via simulations and the dynamics of halo stars in the Milky Way Galaxy.

APPOINTMENTS

- 2021-** *Associate Director*, Michigan Institute for Computational Design and Engineering.
2023- *Director*, Graduate Certificate Program in Computation Science and Engineering, administered by Michigan Institute for Computational Design and Engineering.
2017- *Research Professor*, Department of Astronomy, University of Michigan.
2009- *Intermittent Lecturer*, Department of Astronomy, University of Michigan.
2011–17 *Associate Research Professor*, Department of Astronomy, University of Michigan.
2007–11 *Assistant Research Scientist*, Department of Astronomy, University of Michigan.
2002–07 *Assistant Director*, Kavli Institute for Cosmological Physics, University of Chicago.
2001–07 *Senior Research Associate*, Department of Astronomy & Astrophysics, University of Chicago.
1999–01 *Research Scientist*, Department of Astronomy & Astrophysics, University of Chicago.
1996–99 *Postdoctoral Research Associate*, Rutgers University, NJ
1994–96 *Postdoctoral Research Associate*, Columbia University, NY
1/1994–10/1994 *Postdoctoral Scholar*, Inter-University Center for Astronomy and Astrophysics, Pune, India.

VISITING POSITIONS –

Jun–Jul 2006 *Member* Kavli Institute for Theoretical Physics, UCSB, CA

Jun–Jul 2000 *Visiting Scientist* University of Marseilles, France

Nov 1999 *Visiting Professor* University of La Plata, Argentina

Jan–Apr 1995 *Visiting Scientist* Institute of Astronomy, Cambridge University

PROFESSIONAL ASSOCIATION MEMBERSHIP

1993– Astronomical Society of India (Lifetime member)

1996– American Astronomical Society (AAS)

2005– Division on Dynamical Astronomy (DDA), AAS

2012– International Astronomical Union (IAU)

GRANTS AND AWARDS

2024-2027 NASA, Astrophysics Theory grant: “*23-ATP23-0084, Identifying observable signatures of tumbling dark matter halos*” (**PI - M. Valluri**)

2023-2026 JWST Cycle I Guest Observer proposal “*Do black holes come in small packages?: A census of black holes in compact stellar systems in the Virgo cluster*” (**Co-I, US-PI, M. Valluri**), (PI - M. Taylor)

2023-2026 HST Cycle 29 “*High-resolution ACS/WFC Imaging of Compact Stellar Systems in the Virgo Cluster in Support of JWST Cycle 1 Science*” (**Co-I, US-PI, M. Valluri**), (PI - M. Taylor)

2020-2024 National Science Foundation, Astronomy and Astrophysics Grants: “*Raising the bar for black hole mass measurement in lower mass galaxies*” (**PI - M. Valluri**)

2020-2025 NASA, Astrophysics Theory grant: “*Exploring the nature of dark matter with Gaia*” (**PI - M. Valluri**)

2019-2021 Michigan Institute for Computational Engineering and Design (MICDE) Catalyst grant “*Determining the 3D shape of Milky Way’s Dark Matter Halo*”, (**PI - M. Valluri**)

2018-2023 JWST Early Release Science Proposal (STScI) “*Nuclear Dynamics of a Nearby Seyfert with NIRSpec Integral Field Spectroscopy*”, (**Co-I - M. Valluri**, PI- M. Bentz)

October 2016 University of Michigan, Research Faculty Achievement Award

2015-2019 NSF, Astronomy and Astrophysics Grants: “*Black holes in barred galaxies: the Rosetta stones of secular galaxy evolution*”, (**PI - M. Valluri**)

2015-2019 NASA, Astrophysics Theory grant: “*Self-consistent dynamical modeling of the Milky Way halo with stellar orbits*”, (**PI - M. Valluri**)

2014-2018 HST Cycle 22 Theory Grant: “*Quantifying the Bias in the Masses of Supermassive Black Holes in Barred Galaxies*” , (**PI - M. Valluri**)

2012-2013 Elizabeth Crosby Award: University of Michigan, (**PI - M. Valluri**)

2009-2013 NSF-Astronomy and Astrophysics Grant: “*The dynamics of rotating triaxial galaxies with massive black holes*”, (**PI - M. Valluri**)

2006-2008 HST Cycle 15 Archival Research Grant: “*Resolving the Critical Ambiguities of the M-sigma relation*” (PI - D. Bacheidor), **Co-PI, M. Valluri**

2002-2005 HST Cycle 11 General Observer Grant: “*Nuclear dynamics of NGC 205*”, (PI - L. Ferrarese).

2000-2003 HST Cycle 9 Archival Research Grant: “*Kinematics of nuclear stellar*

- disks around massive central black holes*” , (PI - M. Valluri)
2000-2003 NASA Astrophysics Theory (ATP) Grant: “*Origin and evolution of massive black holes in galaxies*” (PI - D. Merritt, **Co-PI, M. Valluri**)
2000-2003 NSF -Astronomy & Astrophysics Grant: “*Black holes and galaxy evolution*” (PI - D. Merritt), **Co-PI, M. Valluri**
1992 (Indian) Council for Scientific & Industrial Research (CSIR) International Travel Fellowship
1987-1993 Indian Institute of Science - University Grants Commission (INDIA) Graduate Research Fellowship.

SELECTED INVITED TALKS AND COLLOQUIA IN THE PAST 10 YEARS

- 2024, May 14:** University of Arizona, Steward Observatory, Theoretical Astrophysics Program (TAP) Lecturer. Invited to visit for two weeks and give a talk
- 2023, Dec 13:** Plenary Talk, DESI Collaboration meeting “Dark Matter in the Milky Way with DESI”
- 2022, Aug 25:** LIneA Brazilian e-Astronomy Center “Effects of coeval formation of supermassive black holes and stellar bars”
- 2021, Dec 9:** NASA Cosmic Origins, Stars interest Group, online talk “The DESI Milky Way Survey”
- 2020, Oct 21:** Michigan Center for Applied and Interdisciplinary Mathematics Colloquium: “The Dynamical Inference of the Properties of Dark Matter Halos”
- 2020, April 9:** MICDE Annual Symposium, talk title “Probing the nature of dark matter by modeling the Milky Way”
- 2019, April 5:** KITP Conference The Milky Way in Disequilibrium, talk title “Using Tidal Streams to Investigate the Rotation of the Milky Way’s Dark Matter Halo”
- 2018, October 29:** TAP Colloquium University of Arizona, “Barred galaxies and supermassive black hole scaling relations” (Available on You-Tube: https://youtu.be/cUwMIkWE_aY)
- 2018, January 23:** Invited talk at conference “Galaxy evolution and dynamical structures”, IUCAA Pune, India, January 22-25th 2018; “New insights in the dynamical structure of bars and boxy peanut bulges”
- 2018, January 24:** Concluding conference summary talk at “Galaxy evolution and dynamical structures”, IUCAA Pune, India, January 22-25th 2018
- 2016, November 30:** Department of Astronomy, Case Western Reserve University, Cleveland OH, Colloquium
- 2016, August 8-12:** COSMO16, Invited Plenary talk on orbital structure of dark matter halos, Ann Arbor Michigan
- 2016, February 18:** University of Toledo, Department of Physics and Astronomy, Colloquium
- 2015, December 1:** Georgia State University, Department of Physics and Astronomy, Colloquium
- 2015, August 10:** International Astronomical Union, Division A, Invited talk “Using accurate phase space coordinates of halo field stars to constrain the Milky Way Halo”

- 2015, June 3:** Local Group Astrostatistics Conference, Ann Arbor Michigan, Invited talk “Orbital frequency analysis as a tool for characterizing the phase space structure of galaxies”
- 2014, April 29:** Division of Dynamical Astronomy, 45th Meeting, Philadelphia PA, Invited talk “Dynamical and kinematic structure of bars with supermassive black holes”
- 2014, March 14:** University of Surrey, Guildford UK, Department of Physics and Astronomy, Colloquium
- 2014, March 5:** University of Leicester, Leicester, UK, Department of Physics and Astronomy, Colloquium
- 2014, January 14:** Michigan State University, Department of Physics and Astronomy, Colloquium
- 2013, June 24:** “Galaxies within the cosmic web” Conference, Kavli Institute for Cosmological Physics
- 2012, July 10:** European Southern Observatory, Garching, Germany, Colloquium
- 2012, April 18:** Columbia University, New York, NY, Department of Astronomy, Colloquium

TEACHING

(* indicates courses developed)

- Science in Science Fiction:** Astro 182 exploring astronomy through the lens of science fiction, Fall 2023
- Hunting for the dark: Black Holes and Dark matter *:** for Michigan Math and Science Scholars (2 week camp for high school students), Summer 2021, Summer 2023.
- Summer school on galactic dynamics*:** Lectures on orbits in gravitational potentials and use of frequency analysis for understanding potentials at Galactic Dynamics summer school, June 25-30 2019, Shanghai, China.
- Galaxies:** (Astro 404) Upper level galaxies class for astronomy majors, Winter 2019
- Black Holes: Illuminating the Abyss *:** for Michigan Math and Science Scholars (2 week camp for high school students), Summer 2015, Summer 2017.
- Black Holes: The triumph of gravity:** (Astro 206), University of Michigan, Winter 2015, Winter 2016, Winter 2020, Winter 2021, Fall 2022, Winter 2024.
- New Discoveries in Astronomy *:** (Astro 220/420) University of Michigan, Winter 2012, Fall 2013, Fall 2014.
- Space and Earth Science for Elementary School Educators*:** (Earth/Astro 255) University of Michigan, Fall 2013, Fall 2014, Fall 2015.
- Climbing the Distance Ladder – How astronomers survey the Universe:** for Michigan Math and Science Scholars Summers (2 week camp for high school students), 2010-2012, 2014, 65 contact hours each summer.
- The structure and content of galaxies:** (Astro 533) Graduate class, University of Michigan (co-taught with E. Bell), Fall 2010.
- Introductory Astronomy–Stars, Galaxies and the Universe:** (Astro 102) Summer 2009, University of Michigan.
- Mathematics for Business Analysis:** (Business 36101), mathematics for pre-admits to business school, Spring 2000, Spring 2001, Winter 2002, Booth School of Business, University of Chicago.

Dynamics and Structure of Elliptical Galaxies*: mini-course 6 lectures for graduate students at University of La Plata, Argentina.

GRADUATE STUDENTS SUPERVISED OR CO-ADVISED

- 2021-** University of Michigan
- 2005-2007** I. M.Vass (University of Florida, Gainesville & University of Chicago, following the death of her advisor H. Kandrup).
- 2003-2008** J. M. Siegal-Gaskins (University of Chicago, student of Angela Olinto).
- 2013-2018** Klaudia Kowalczyk (Copernicus Institute, University of Warsaw, Poland, co-advised student of Ewa Lokas
- 2019-2022** Youjia Wu, University of Michigan, Department of Physics, co-advised with K. Freese (University of Texas, Austin).
- 2021-** Neil Ash, University of Michigan, Department of Astronomy.
- 2022-** Shashank Dattathri, Yale University, Department of Astronomy (co-advised on some projects along with main advisor Frank van den Bosch
- 2023-** Nabeel Rehemtulla, Northwestern University, CIERA (co-advising on DESI project on which NR is an external collaborator application of research from his undergrad).

POSTDOCS SUPERVISED/MENTORED

- 2013–2017** Dr. Sarah R. Loebman (Now Assistant Professor at University of California, Merced)
- 2016–2019** Dr. Kohei Hattori (Now Assistant Professor at National Astronomical Observatory of Japan)
- 2017–2018** Dr. Leandro Beraldo e Silva
- 2018–2021** Dr. Khyati Malhan (Now postdoc Max Planck Institute for Astronomy, Heidelberg)
- 2018–2021** Dr. Pablo Fernandez de Salas (Now industry)
- 2021–2023** Dr. Leandro Beraldo e Silva
- 2023-** Dr. Behzad Tehmasebzade

PHD DISSERTATION/THESIS EXAMINATION COMMITTEE MEMBER

- 2007** Ileana M.Vass, PhD. Astronomy, University of Florida
- 2011** Cosmin Illie, PhD. Physics, University of Michigan
- 2013** Klaudia Kowalczyk, PhD. Physics, (Copernicus Institute, University of Warsaw, Poland)
- 2015** Colin Slater, PhD. Astronomy, University of Michigan
- 2017** Vivienne Baldassare, PhD. (Astronomy), University of Michigan
- 2017** Meghan Spencer, PhD. (Astronomy), University of Michigan
- 2019** Caroline Roberts, PhD. (Astronomy), Georgia State University
- 2020** Adam Smercina, PhD. (Astronomy), University of Michigan
- 2020** Yingyi Song, PhD. (Astronomy), University of Michigan
- 2021** Adriano Poci, PhD. (Astrophysics), Macquarie University, Australia
- 2023** Katherine Merrell, PhD. (Astrophysics), Georgia State University
- 2021** – Katherine Napier, (Astrophysics), University of Michigan
- 2023** – Cayenne Matt, (Astrophysics), University of Michigan
- 2023** – C.J. Harris, Astrophysics, University of Michigan

UNDERGRADUATES AND POST BACCALAUREATE SUPERVISED SINCE 2008

32. Vincent Claes (University of Michigan, May 2024 – , UM astro undergrad)
31. Saarthak Johri (University of Michigan, March, 2024– , UM physics undergrad)
30. Michelle Jecmen (University of Michigan, Sep. 2023 – May 2024 UM astro undergrad)
29. Rishabh Ranjan (University of Michigan, May, 2023– , UM physics undergrad)
28. Matthew Fischer (University of Michigan, Jan. 2023 - April 2023, UM astro undergrad)
27. Andrew Lapeer (University of Michigan, Sep. 2022 - July 2024 , UM astro undergrad)
26. Shashank Dattathri (University of Michigan, Sep. 2021-Jun 2022, now grad at Yale, Astro)
25. Vance Wheeler (University of Michigan, May 2019–May2022, now grad at UChicago, Physics)
24. Rebecca Guilfoyle (University of Michigan, Sep 2019–May 2021)
23. Tanvi Deshmukh (University of Michigan, Jan 2019–Sep. 2021, now grad at UChicago, Physics)
22. Joseph Hofer (University of Michigan, Sep. 2017–Aug. 2018)
21. Nabeel Reheemtulla (University of Michigan, Sep. 2017–Aug. 2021, now grad at Northwestern U.)
20. Brendan Massey (University of Michigan, Sep. 2017-Apr 2019, now grad at UPenn, CS)
19. Sarah Snyder (University of Michigan, May 2016–Jun 2018, now grad at U Toronto, Information)
18. Brendan Reed (University of Michigan, May 2016–2017, now grad at U Indiana, Astro)
17. Benjamin Dittenber (University of Michigan, 2015–2017)
16. Erika Greenfelder (University of Michigan, May–Aug 2016)
15. Caleb Abbott (University of Michigan, 2014-2016, now grad at GSU, Astro)
14. Mitchell Worner (University of Michigan, 2012-2013)
13. Kaitlyn Frank (University of Michigan, 2012-2013)
12. Kyle Hinton (University of Michigan, Fall 2012)
11. Austin Yarger (University of Michigan, Winter 2012)
10. David Thompson (University of Michigan, 2011-2012)
9. Samsul Hoque (University of Michigan, 2011-2012)
8. Amlan Nayak (University of Michigan, 2011-2012)
7. Jon Brown (University of Michigan, 2011-2013), grad OSU, postdoc UC Santa Cruz.
6. Alex Khoriarty (University of Michigan, Fall 2010)
5. Evan Fletcher (University of Michigan, 2010-2011)
4. Yijia Tang (University of Michigan, 2010-2011)
3. Nicholas Crnjanski (University of Michigan, Fall 2009)
2. Annalyn Ng (University of Michigan, Summer 2009)
1. Alex Deibel (University of Michigan, 2008-2010), grad MSU, now Astro lecturer U. Indiana.

SELECTED SERVICE

- 2023** NASA Review Panel
- 2022-** Co-Convener, Milky Way Dark Matter Topical Group within DESI Collaboration
- 2022** INCITE, DOE peer review
- 2022-23** HST proposal peer review
- 2021** NASA Review Panel
- 2020-2022** Co-Chair, Dark Energy Spectroscopic Instrument (DESI) Milky Way Survey Working Group
- 2020-2021** Member, Department of Astronomy, Graduate Prelim Exam committee
- 2020** NSF proposal review panel.
- 2018-2019** Co-Chair of SOC for IAU Symposium 353 “Galactic Dynamics in the Era of Large Surveys”, Shanghai China, July 1-5, 2019
- 2018-2019** Co-Chair of Galactic Dynamics Summer School organized in Shaghai Jiao Tong University, June 24-28 2019
- 2017-2019** UM Office of Research Committee for selecting “Distinguished Research Faculty” awardees
- 2017–2018** Department of Astronomy, Graduate Prelim Exam committee
- 2017-2018** Referee, Research Corporation for Science Advancement
- 2017** NASA proposal review panel (Chair)
- 2016–2017** Department of Astronomy, Graduate Admissions committee
- Oct 2016** Scientific organizing committee member “Testing Dark Matter in the era of Gaia”, NORDITA workshop
- 2016–2017** Chair, Division of Dynamical Astronomy, American Astronomical Society (Elected position)
- 2015–2016** Vice Chair, Division of Dynamical Astronomy, American Astronomical Society (Elected position)
- Jun. 2015** Scientific Organizing committee member “Local Group Astro Statistics”
- 2014–2021** Founder and Organizer of “Conversations on Equity and Inclusion in Astrophysics” (2-3 talks/discussions per semester at U. Michigan)
- Jul.–Aug. 2013** Lead Organizer, Aspen Center for Physics Summer Workshop “The Milky Way: A Laboratory for Galaxy Formation”
- Nov. 2011-January 2013** Member of Department of Astronomy ad hoc committee to prepare proposal and formulate guidelines for “Michigan Institute of Astrophysical Research” (Chair: Eric F. Bell). I was asked to serve on this committee because of my 5 years of experience as the Assistant Director of the Kavli Institute for Cosmological Physics at University of Chicago
- 2013–2015** Member of Department of Astronomy undergraduate curriculum committee (Chair: Sally Oey)
- Aug. 2011** Co-organizer MCTP work shop “Double and Single Black Holes in Galaxies”, Ann Arbor MI
- 2009–2011** Division Committee Member, Division of Dynamical Astronomy, American Astronomical Society (Elected position)
- 2005** Co-organizer, International conference “New Views of the Universe: KICP Inaugural Symposium in honor of David Schramm”, December 2005
- 2005–2007** Member, University of Chicago, Women in Physical Sciences Committee

- 2005–2007** Coordinator, Women in Astronomy and Physics (WAP) support group, University of Chicago
- 2005** Member UChicago Team, Center for Integration of Research Teaching and Learning (CIRTL, UWisconsin) conference on “Achieving Diversity in STEM disciplines”, Univ. of Wisconsin, Madison
- 2000–** Proposal reviewer for: NSF (Division of Astronomical Sciences); NASA (ATP, ADAP, LTSA), HST, Gemini, LLNL Computational Grand Challenge, NASA Postdoctoral Fellowship Program
- 1998** Chairperson, Local Organizing Committee for conference “Galaxy Dynamics”, Rutgers University. Co-editor of the conference proceedings published by the Astronomical Society of the Pacific (ASP)
- 1994–** Current referee for: The Astrophysical Journal (ApJ) and Astrophysical Journal Letters (ApJL), The Astronomical Journal (AJ), Monthly Notices of the Royal Astronomical Society (MNRAS), Astronomy & Astrophysics (A&A), Astrophysics and Space Science (ApSS); Journal of Cosmology and Astroparticle Physics (JCAP), Journal of Astronomy & Astrophysics (Indian Academy of Sciences); Publications of the Astronomical Society of Australia, Publications of the Astronomical Society of Japan

BIBLIOGRAPHY

CITATION STATISTICS

h-index: 39 (Harvard ADS), 43 (Google Scholar)

Total number of citations > 5600

CONFERENCE PROCEEDINGS EDITED

1. **Galaxy Dynamics - A Rutgers Symposium**, 1999, Editors: D. R., Merritt, J. A., Sellwood, & **M., Valluri** 1999. Astronomical Society of the Pacific Conf. Ser. 182
2. **Galactic Dynamics in the Era of Large Surveys, Proceedings of IAU Symposium 353**, 2020, held in Shanghai, Peoples Republic of China, July 1-5, 2019, Editors: **M. Valluri** & J. A., Sellwood, Cambridge University Press. DOI: 10.1017/S1743921320000964

ARTICLES IN REFEREED JOURNALS

88. DESI Collaboration and 265 colleagues 2024. Validation of the Scientific Program for the Dark Energy Spectroscopic Instrument. The Astronomical Journal 167. doi:10.3847/1538-3881/ad0b08
87. Dattathri, S., Valluri, M., Vasiliev, E., Wheeler, V., Erwin, P. 2023. Deprojection and stellar dynamical modelling of boxy/peanut bars in edge-on discs. MNRAS, 530, 1195 arXiv e-prints. doi:10.48550/arXiv.2309.11557
86. Bentz, M. C. and 6 colleagues 2023. Velocity-resolved Reverberation Mapping of NGC 3227. The Astrophysical Journal 959. doi:10.3847/1538-4357/ad08b8
85. Wheeler, V., Valluri, M., Beraldo e Silva, L., Dattathri, S., Debattista, V. P. 2023. Early-growing Supermassive Black Holes Strengthen Bars and Boxy/Peanut Bulges. The Astrophysical Journal 958. doi:10.3847/1538-4357/ace962

84. Allende Prieto, C. and 50 colleagues 2023. GTC Follow-up Observations of Very Metal-poor Star Candidates from DESI. *The Astrophysical Journal* 957. doi:10.3847/1538-4357/acfa96
83. Ash, N., Valluri, M. 2023. Figure Rotation of IllustrisTNG Halos. *The Astrophysical Journal* 955. doi:10.3847/1538-4357/acf30c
82. Beraldo e Silva, L. and 6 colleagues 2023. Orbital Support and Evolution of Flat Profiles of Bars (Shoulders). *The Astrophysical Journal* 955. doi:10.3847/1538-4357/ace976
81. DESI Collaboration and 264 colleagues 2023. The Early Data Release of the Dark Energy Spectroscopic Instrument. arXiv e-prints. doi:10.48550/arXiv.2306.06308
80. DESI Collaboration and 261 colleagues 2023. Validation of the Scientific Program for the Dark Energy Spectroscopic Instrument. arXiv e-prints. doi:10.48550/arXiv.2306.06307
79. Merrell, K. A., Vasiliev, E., Bentz, M. C., **Valluri, M.**, Onken, C. A. “The Mass of the Black Hole in NGC 5273 from Stellar Dynamical Modeling”, *The Astrophysical Journal* 949. doi:10.3847/1538-4357/acc4bc eprint arXiv:2212.02484
78. Cooper, A. P. and 64 colleagues 2023. “Overview of the DESI Milky Way Survey.” *The Astrophysical Journal* 947. doi:10.3847/1538-4357/acb3c0
77. Bentz, M. C., Onken, C. A., Street, R., Valluri, M. 2023. “Reverberation Mapping of IC 4329A.” *The Astrophysical Journal* 944. doi:10.3847/1538-4357/acab62
76. Dey, A. and 47 colleagues 2023. “DESI Observations of the Andromeda Galaxy: Revealing the Immigration History of Our Nearest Neighbor.” *The Astrophysical Journal* 944. doi:10.3847/1538-4357/aca5f8
75. Bentz, M. C., Onken, C. A., Street, R., **Valluri, M.** 2022. “Reverberation Mapping of IC4329A.” (ApJ Accepted) arXiv e-prints. doi:10.48550/arXiv.2212.05954
74. Abareshi, B. and 268 colleagues 2022. Overview of the Instrumentation for the Dark Energy Spectroscopic Instrument. *The Astronomical Journal* 164. doi:10.3847/1538-3881/ac882b
73. Dey, A. and 47 colleagues including **M. Valluri** 2022. “DESI Observations of the Andromeda Galaxy: Revealing the Immigration History of our Nearest Neighbor.” *ApJ*, 944, 1, e-prints. doi:10.48550/arXiv.2208.11683
72. Malhan, K., **Valluri, M.**, Freese, K., Ibata, R. A. 2022. “New constraints on the dark matter density profiles of dwarf galaxies from proper motions of globular cluster streams”. *ApJ Letters* 941, 38 e-print arXiv:2201.03571, doi:10.3847/2041-8213/aca6e5
71. Roier, G. R. H. and 16 colleagues (including **M Valluri**) 2022. “Gas inflows in the polar ring of NGC 4111: the birth of an AGN.” *MNRAS*, 512, 2556 e-print arXiv:2203.02532, 642/tmp. doi:10.1093/mnras/stac634
70. Rehemtulla, N., **Valluri, M.**, Vasiliev, E. 2022. “Non-parametric spherical Jeans mass estimation with B-splines.” *MNRAS* 511, 5536. e-print/arXiv:2202.05440, doi:10.1093/mnras/stac400
69. Wu, Y., **Valluri, M.**, Panithanpaisal, N., Sanderson, R., Freese, K., Wetzel, A., Sharma, S. 2022 “Using Action Space Clustering to Constrain the Accretion History of Milky Way like Galaxies” arxiv e-print, arXiv:210408185, *MNRAS* 509, 5882.

68. Roberts, C. A., Bentz, M. C., Vasiliev, E., Valluri, M., 2021 “The Black Hole Mass of NGC 4151 from Stellar Dynamical Modeling”, arxiv e-print, arXiv:210602758, ApJ, 916, 25.
67. Hattori, K. **Valluri, M.**, Vasiliev, E. 2021, “Action-based distribution function modelling for constraining the shape of the Galactic dark matter halo”, arxiv e-print, arXiv:2012.03908, MNRAS, 508, 5468.
66. Bentz, M. C., Williams, P. R., Street, R., Onken, C. A., **Valluri, M.**, Treu, T. 2021.² A Detailed View of the Broad-line Region in NGC 3783 from Velocity-resolved Reverberation Mapping.” ApJ, 920, 112
65. Malbet, F. and 85 colleagues (including MV) 2021. “Faint objects in motion: the new frontier of high precision astrometry.” Experimental Astronomy 51, 845?886.
64. **Valluri, M.**, Price-Whelan, A., & Snyder, S. J. 2021, “Detecting the Figure Rotation of Dark Matter Halos with Tidal Streams”, arXiv e-prints, arXiv:2009.09004, ApJ, 910, 150.
63. Malhan, K., **Valluri, M.**, & Freese, K. 2021, “Probing the Nature of Dark Matter with Accreted Globular Cluster Streams”, MNRAS, 501, 179
62. Bentz, M. C., Street, R., Onken, C. A. & **Valluri, M.** 2021, “Robotic Reverberation Mapping of the southern Seyfert galaxy NGC 3783”, ApJ , 906, 50
61. Vasiliev, E., & **Valluri, M.** 2020, “A New Implementation of the Schwarzschild Method for Constructing Observationally Driven Dynamical Models of Galaxies of All Morphological Types” ApJ, 889, 39
60. Bentz, M. C., Ferrarese, L. Onken, C. A., Peterson, B. M., **Valluri, M.** 2019 “A Cepheid Distance to NGC 6814”, ApJ, 885, 161
59. de Salas, P. F., Malhan, K., Freese, K., Hattori, K., **Valluri, M.** 2019. “On the estimation of the Local Dark Matter Density using the rotation curve of the Milky Way.”, JCAP, 2019, 037
58. Wu, Y., Freese, K., Kelso, C., Stengel, P., **Valluri, M.** 2019. “Uncertainties in Direct Dark Matter Detection in Light of Gaia.” JCAP 2019, 034.
57. Malhan, K., Ibata, R. A., Carlberg, R. G., **Valluri, M.**, Freese, K. 2019. “Butterfly in a Cocoon, Understanding the origin and morphology of Globular Cluster Streams: The case of GD-1.” arXiv e-prints arXiv:1903.08141.
56. Hattori, K., **Valluri, M.**, Castro, N., Roederer, I. U., Mahler, G., Khullar, G. 2019. “Origin of a Massive Hyper-runaway Subgiant Star LAMOST-HVS1: Implication from Gaia and Follow-up Spectroscopy.” ApJ, 873, 116.
55. Beraldo e Silva, L., de Siqueira Pedra, W., **Valluri, M.**, 2019, “The discreteness driven relaxation of collisionless gravitating systems: entropy evolution and the Nyquist-Shannon Theorem” , ApJ, 872, 20
54. Beraldo e Silva, L., de Siqueira Pedra, W., **Valluri, M.**, Sodr e, L. Bru, J-B., 2018, “The discreteness-driven relaxation of collisionless gravitating systems: entropy evolution in fixed external potentials, N-dependence and the role of chaos”, ApJ, 870, 128, arXiv:1811.00646

53. Hattori, Kohei, **Valluri, M.** Castro, N. Roederer, I. U., Mahler, G., Khullar, G. 2019, “Origin of a massive hyper-runaway subgiant star LAMOST-HVS1 – implication from Gaia and follow-up spectroscopy”, *ApJ*, 873, 116, arXiv:181002029.
52. Kowalczyk, K, del Pino, A., Lokas, E.L, **Valluri, M.**, 2018, “ Schwarzschild dynamical model of the Fornax dwarf spheroidal galaxy”, *MNRAS*, 482, 524.
51. Roederer, I. U. Hattori, K., **Valluri, M.**, “Kinematics of Highly r-process-enhanced Field Stars: Evidence for an Accretion Origin and Detection of Several Groups from Disrupted Satellites”, 2018, *AJ*, 156,179.
50. Hattori, K., **Valluri, M.**, Bell, E., & Roederer, I. U. 2018, “Old, Metal-Poor Extreme Velocity Stars in the Solar Neighborhood”, *ApJ* 866, 121, (arXiv:180503194).
49. Hattori, K., **Valluri, M.**, & Castro, N. 2018 “Constraining Solar position and velocity with a Nearby Hypervelocity Star”, *ApJ*, 869, 33, (arXiv:180408590).
48. Kowalczyk, K., Lokas, E. L. & **Valluri, M.** 2018, “The effect of non-sphericity on mass and anisotropy measurements in dSph galaxies with Schwarzschild method”, *MNRAS*, 476, 2918, (arXiv:1708.09425).
47. Loebman, S. R., **Valluri, M.**, Hattori, K., Debattista, V. P., Bell, E., Stinson, G., Christensen, C., Brooks, A., Quinn, T. R., Governato, F., 2018, “Beta dips in the Gaia Era: Simulation predictions of galactic velocity anisotropy parameter beta for halo stars”, *ApJ*, 853, 196, (arXiv:1704.06264).
46. Hattori, K., **Valluri, M.**, Loebman, S. R., Bell, E. 2017, “Reliability of the measured velocity anisotropy of Milky Way stellar halo” *ApJ*, 841, 91, (arXiv:1704.06286).
45. Kowalczyk, K., Lokas, E. L. & **Valluri, M.**, 2017, “Recovering the mass profile and orbit anisotropy of mock dwarf galaxies with Schwarzschild modelling”, *MNRAS*, 470, 3959 (arXiv:1702.06065).
44. Abbott, C. G., **Valluri, M.**, Shen, J., Debattista, V. P., 2017, “On the orbits that generate X-shapes and box-peanut bulges”, *MNRAS*, 470, 1526 (arXiv:1703.07366).
43. Kelso, C., Savage, C., **Valluri, M.**, Freese, K., Stinson, G. S.; Bailin, J., 2016, “The impact of baryons on the direct detection of dark matter”, *JCAP*, 08, 071 (arXiv:1601.04725).
42. Roederer, I. U., Mateo, M., Bailey, J., Song, Y., Bell, E. F., Crane, J. D., Loebman, S. R., Nidever, D. L., Olszewski, E. W.; Shectman, S. A., Thompson, I. B., **Valluri, M.**, Walker, M. G., 2016, “Detailed chemical abundances in the *r*-process-rich ultra-faint dwarf galaxy Reticulum 2”, *A.J.*, 151, 82 (arXiv:1601.04070).
41. **Valluri, M.**, Shen, J., Abbott, C. & Debattista, V. P., 2016 “A unified view of the orbital structure of bars and triaxial ellipsoids”, *ApJ*, 818, 141 (arXiv:1512.03467).
40. Loebman, S. R., Debattista, V. P., Nidever, D. L., Hayden, M. R. Holtzman, J. A., Clarke, A. J., Roskar, R. **Valluri, M.**, 2016 “Imprints of radial migration on the Milky Way’s metallicity distribution functions”, *ApJ Letters*, 181, 6, (arXiv:1511.06369).
39. Freese, K., Rindler-Daller, T., Spolyar, D. & **Valluri, M.**, 2016, “Darks Stars: A review” invited review, *Reports on Progress in Physics*, 79, Issue 6, 066902 (arXiv:1501.02394).

38. Snaith, O., Bailin, J. A., Gibson, B., Bell, E. F., Stinson, G. S., **Valluri, M.**, Wadsley, J., 2016 “The history of stellar metallicity in a simulated disc galaxy”, MNRAS, 456, 3119 (arXiv:1512.02680).
37. Price-Whelen, A., Johnston, K. V., **Valluri, M.**, Pearson, S., Kupper, A. H. W., Hogg, D. W., 2016, “Chaotic dispersal of tidal debris”, MNRAS, 455, 1079 (arXiv:1507.08662)
36. Lokas, E. L., Athanassoula, E., Debattista, V. P., **Valluri, M.**, del Pino, A., Semczuk, M., Gajda, G., Kowalczyk, K., 2014, “Adventures of a tidally induced dwarf”, MNRAS, 445, 1339 (arXiv:1404.1211)
35. Onken, C. A., **Valluri, M.**, Brown, J. S. et al., 2014, “The Black Hole Mass of NGC 4151. II. Stellar Dynamical Measurement from Near-Infrared Integral-Field Spectroscopy”, ApJ, 791, 37 (arXiv:1406.6735)
34. Peterson, B. et al. (45 co-authors), 2014, “Reverberation mapping of the Seyfert 1 galaxy NGC 7469”, ApJ, 795, 149 (arXiv:1409.4448)
33. Baldassare, V., Gallo, E., Miller, B. P., Plotkin, R. M., Treu, T., **Valluri, M.**, Woo, J.-H., 2014, “AMUSE-Field II: Nucleation of early-type galaxies in the field vs. cluster environment”, ApJ, 791, 133 (arXiv:1406.6697)
32. Hartmann, M., Debattista, V. P., Cole, D., **Valluri, M.**, Widrow, L., Shen, J., 2013, “The effect of bars on the $M_{bh} - \sigma$ relation: offset, scatter and residuals correlations”, MNRAS, 441, 1243 (arXiv:1309.2634)
31. Bailin, J., Bell, E. F., **Valluri, M.**, Stinson, G. S., Debattista, V. P., Couchman, H. M. P & Wadsley, J., 2014, “Systematic problems with stellar halo models”, ApJ, 783, 95 (arXiv:1401.5489)
30. Brown, J. S., **Valluri, M.**, Shen, J. & Debattista, V.P., 2013, “On the off-set of barred galaxies from the black hole $M_{bh} - \sigma$ relation”, ApJ, 778, 151 (arXiv:1305.5265)
29. Debattista, V. P., Roskar, R. **Valluri, M.**, Quinn, T. R. Moore, B. & Wadsley, J., 2013, “What’s up in the Milky Way? On the orientation of the disc relative to the triaxial halo”, MNRAS, 434, 297 (arXiv:1301.2760)
28. Batcheldor, D., Axon, D. **Valluri, M.** et al., 2013, “A STIS atlas of CaII absorption line kinematics in galactic nuclei”, AJ 146, 67 (arXiv:1308.1983)
27. **Valluri, M.**, Debattista, V. P., Stinson, G. S., Bailin, J., Quinn, T. R., Couchman, H. M. P. Wadsley, J., 2013, “Halo orbits in cosmological disk galaxies: tracers of formation history”, ApJ, 767, 93 (arXiv:1301.4517)
26. Grier, C. J., et al., 2013, “The Structure of the broad line region in AGN: I. reconstructed velocity-delay maps”, ApJ, 764, 47 (arXiv:1210.2397)
25. Grier, C. J., et al., 2012, “Reverberation mapping results for five Seyfert 1 galaxies”, ApJ, 755, 60 (arXiv: 1206.6523)
24. Ilie, C., Freese, K. **Valluri, M.**, Iliev, I. T. & Shapiro, P., 2012, “Observing dark stars with JWST”, MNRAS, 422, 2164 (arXiv:1110.6202)

23. **Valluri, M.**, Debattista, V. P., Quinn, T. R., Roskar, R., Wadsley, J., 2012, “Probing the shape and history of the stellar halo with orbital spectral analysis”, *MNRAS*, 419, 195 (arXiv:1109.3193)
22. Grier, C J. et al., 2012, “A reverberation lag for the high-ionization component of the broad-line region in the narrow-line seyfert 1 Mrk 335”, *ApJ*, 744, 4 (arXiv:1110.6179)
21. Deibel, A. & **Valluri, M.**, Merritt, D., 2011 “The orbital structure of triaxial galaxies with figure rotation” *ApJ*, 728, 128 (arXiv:1008.2753)
20. Freese, K., Ilie, C., Spolyar, D., **Valluri, M.**, & Bodenheimer, P., 2010, “Supermassive Dark Stars: Detectable with JWST”, *ApJ*, 716, 139 (arXiv:1002.2233)
19. **Valluri, M.**, Debattista, V. P., Quinn, T. R. & Moore, B., 2010, “The orbital evolution of triaxial halos due to baryon condensation”, *MNRAS*, 403, 525 (arXiv:0906.4784)
18. Vass, I. M., Kazantzidis, S. **Valluri, M.**, & Kravtsov, A. V., 2009, “Evolution of dark matter phase-space density distributions in equal-mass halo mergers” *ApJ*, 698, 1813 (arXiv:0812.3659)
17. Vass, I. M., **Valluri, M.**, Kravtsov, A. V. & Kazantzidis, S., 2009 , “Evolution of the dark matter phase-space density distributions of LCDM halos”, *MNRAS*, 395, 1225 (arXiv:0810.0277)
16. Siegal-Gaskins, J. M. & **Valluri, M.**, 2008, “Signatures of Λ CDM substructure in tidal debris”, *ApJ*, 681, 40 (arXiv:0710.0385)
15. Onken, C. A., **Valluri, M.**, Peterson, B. M., & 11 coauthors, 2007, “The black hole mass of NGC 4151: Comparison of reverberation mapping and stellar dynamical measurement”, *ApJ*, 670, 105 (arXiv:0708.1196)
14. **Valluri, M.**, Vass, I. M., Kazantzidis, S., Kravtsov, A. V. & Bohn, C. L., 2007, “On relaxation processes in collisionless mergers”, *ApJ*, 658, 731 (arXiv:astro-ph/0609612)
13. **Valluri, M.**, Ferrarese, L., Merritt, D., Joseph, C. L., 2005, “The low end of the supermassive black hole mass function: Constraining the mass of a nuclear black hole in NGC 205 via stellar kinematics”, *ApJ* 628, 137 (arXiv:astro-ph/0502493)
12. **Valluri, M.**, Merritt, D., Emsellem, E., 2004, “Difficulties with recovering the masses of supermassive black holes from stellar kinematical data”, *ApJ* 602, 66 (arXiv:astro-ph/0210379)
11. van Gorkom, J. H., Bravo-Alfaro, H., Dwarakanath, K. S., Guhathakurta, P., Poggianti, B. M., Schiminovich, D., **Valluri, M.**, Verheijen, M., Wilcots, E., Zabludoff, A., 2003, “An HI survey of clusters in the local universe”, *Astrophysics and Space Science* 285, 219
10. Joseph, C. L., Merritt, D., Olling, R. O., **Valluri, M.**, & Bender, R. and the STIS GTO team, 2001, “The nuclear dynamics of M32. I. Data and stellar kinematics”, *ApJ*, 550, 668 (arXiv:astro-ph/0005530)
9. Merritt, D., **Valluri, M.**, 1999, “Resonant orbits in triaxial galaxies”, *Astronomical Journal* 118, 1177 (arXiv:astro-ph/9903452)
8. **Valluri, M.** & Merritt, D., 1998, “Regular and chaotic dynamics of triaxial stellar systems”, *ApJ*, 506, 686 (arXiv:astro-ph/9801041)

7. Sellwood, J. A. & **Valluri, M.**, 1997, “Instabilities of a family of oblate stellar spheroids”, MNRAS, 287, 124 (arXiv:astro-ph/9612069)
6. Merritt, D. & **Valluri, M.**, 1996, “Chaos and mixing in triaxial stellar systems”, ApJ, 471, 82 (arXiv:astro-ph/9602079)
5. **Valluri, M.** & Anupama, G. C., 1996, “H α Imaging of the Hickson Compact Group 62”, Astronomical Journal 112, 1390 (arXiv:astro-ph/9607138)
4. **Valluri, M.**, 1994, “A model for the declining rotation curves of cluster spiral galaxies”, ApJ, 430, 101
3. **Valluri, M.**, 1993, “Compressive tidal heating of a disk galaxy in a rich cluster”, ApJ 408, 57
2. **Valluri, M.** & Jog, C. J., 1991, “H I deficiency in cluster spiral galaxies - Dependence on galaxy size”, ApJ, 374, 103
1. **Valluri, M.** & Jog, C. J., 1990, “Collisional removal of H I from the inner disks of Virgo Cluster galaxies”, ApJ, 357, 367

SELECTED UNREFEREED ARTICLES, WHITE PAPERS, CONFERENCE PROCEEDINGS

65. Beraldo e Silva, L., Valluri, M. 2023. naif: Frequency analysis package. Astrophysics Source Code Library. ascl:2303.004
64. Dattathri, S., Valluri, M., Vasiliev, E., Wheeler, V., Erwin, P. 2024. Deprojection of edge-on barred galaxies with boxy/peanut bulges and its application to Schwarzschild modelling. American Astronomical Society Meeting Abstracts.
63. Lapeer, A., Tahmasebzadeh, B., Valluri, M., Vasiliev, E., Taylor, M. 2024. Probing the Lower Limits of Detectable Central Black Hole Masses in Virgo Cluster CSS with JWST NIRSpec IFU Kinematics. American Astronomical Society Meeting Abstracts.
62. Das, N., Bentz, M., Vasiliev, E., Valluri, M. 2024. A Stellar Dynamical Mass for the Bright Seyfert Galaxy MCG-06-30-15. American Astronomical Society Meeting Abstracts.
61. **Valluri, M.**, Chabanier, S., Irsic, V. and 29 colleagues, “Snowmass2021 Cosmic Frontier White Paper: Prospects for obtaining Dark Matter Constraints with DESI”, Contributed white paper to Snowmass 2021, CF03, <http://arxiv.org/abs/2203.07491>
60. Vasiliev, E., & **Valluri, M.** 2020, “Schwarzschild modeling of barred galaxies”, IAU Symposium 353 “Galactic Dynamics in the Era of Large Surveys”, Eds: M Valluri & J. A. Sellwood, (Cambridge University Press), p.176
59. Hattori, K., & **Valluri, M.** 2020, “The shape of the dark matter halo revealed from a hypervelocity star” IAU Symposium, 353 “Galactic Dynamics in the Era of Large Surveys”, Eds: M Valluri & J. A. Sellwood, (Cambridge University Press), p. 96
58. Vasiliev, E., & **Valluri, M.** 2019, FORSTAND: Flexible ORbit Superposition Toolbox for ANalyzing Dynamical models, ascl:1912.009

57. Schlegel, D. J., and 76 colleagues 2019. “Astro2020 APC White Paper: The MegaMapper: a $z > 2$ spectroscopic instrument for the study of Inflation and Dark Energy.” arXiv e-prints arXiv:1907.11171.
56. Dey, A., and 24 colleagues 2019. “Mass Spectroscopy of the Milky Way.” Bulletin of the American Astronomical Society 51, 489.
55. Sanderson, R., and 34 colleagues 2019. “The Multidimensional Milky Way.” Bulletin of the American Astronomical Society 51, 347.
54. Gültekin, K., and 10 colleagues 2019. “Astro2020 Science White Paper: Black Holes Across Cosmic Time.” Bulletin of the American Astronomical Society 51, 287.arXiv e-prints arXiv:1904.01447.
53. Roberts, C. A., Bentz, M., Valluri, M., Vasiliev, E., Onken, C. A., Batiste, M. 2019. “The Supermassive Black Hole Mass of NGC 4151 from Stellar Dynamical Modeling.” American Astronomical Society Meeting Abstracts #233 233, 330.02.
52. Massey, B., Valluri, M. 2019. “Escape Velocity Curves of Simulated Milky Way Analogues.” American Astronomical Society Meeting Abstracts #233 233, 256.16.
51. Roederer, I., Hattori, K., Valluri, M. 2019. “Using Gaia DR2 to study the kinematics of highly r-process-enhanced stars.” American Astronomical Society Meeting Abstracts #233 233, 231.04.
50. **Valluri, M.**, Vasiliev, E., Bentz, M., Shen, J., “Estimating biases in the stellar dynamical black hole mass measurements in barred galaxies and prospects for measuring SMBH masses with JWST”, 2018, American Astronomical Society, DDA meeting#4, id.#303.01
49. Batiste, M., Bentz, M. C., Valluri, M., Onken, C. A., “A Stellar Dynamical Black Hole Mass for the Reverberation Mapped AGN NGC 5273”, 2018, American Astronomical Society, AAS Meeting #231, id.#422.08
48. Roberts, C. A., Bentz, M. C., Batiste, M., Valluri, M., Vasiliev, E., “Stellar Dynamical Modeling of AGN for Comparison with Reverberation Mapping”, 2018 American Astronomical Society, AAS Meeting #231, id.#422.07
47. **Valluri, M.**, Snyder, S. J., Price-Whelan, A. M., 2017 “Using tidal streams to investigate the rotation of the Milky Way’s dark matter halo”, 2017, American Astronomical Society, DDA meeting#48, id.#201.03
46. The Theia Collaboration, “Theia: Faint objects in motion or the new astrometry frontier”, 2017, (arXiv:1707.01348)
45. DESI Collaboration (292 co-authors) 2017 “The DESI Experiment Part I: Science, Targeting, and Survey Design” (arXiv:1611.00036)
44. DESI Collaboration (292 co-authors) 2017 “The DESI Experiment Part II: Instrument Design”
43. Kowalczyk, K., Lokas, E. L., **Valluri, M.** 2017, “Studying dark matter haloes with Schwarzschild modeling”, in proceedings of IAU Symposium, 321 “Formation and Evolution of Galaxy Outskirts”, 130

42. Dittenber, B. & **Valluri, M.** 2017, “Improving Stellar Velocity Dispersion Measurements in Barred Spiral Galaxies With Supermassive Black Holes” American Astronomical Society, AAS Meeting #229, id.#144.04
41. Loebman, S. R., **Valluri, M.** et al. 2017 “Beta Dips in the Gaia Era: Simulation Predictions of the Galactic Velocity Anisotropy Parameter (β)”, American Astronomical Society, AAS Meeting #229, id.#134.07
40. **Valluri, M.** 2016, “Orbits in N-body bars and the origin of the X-shapes in boxy-peanut bulges” American Astronomical Society, DDA meeting #47, id.#302.04
39. Abbott, C., **Valluri, M.**, Shen, J., & Debattista, V. P. 2016, “Orbital kinematics of edge-on bars with and without supermassive black holes”, American Astronomical Society Meeting Abstracts, 227, 341.12
38. Price-Whelan, A. M., Johnston, K. V., **Valluri, M.**, et al. 2016, “Chaos and tidal streams”, American Astronomical Society Meeting Abstracts, 227, 326.04
37. Manne-Nicholas, E., Batiste, M., **Valluri, M.**, et al. 2016, “A stellar Dynamical black hole Mass for broad-lined Seyfert galaxy NGC 6814 and comparison to results from reverberation mapping”, American Astronomical Society Meeting Abstracts, 227, 104.08
36. Kowalczyk, K., Lokas, E. L., & **Valluri, M.** 2015, “Orbit anisotropy of dark matter haloes with Schwarzschild modelling” arXiv:1512.07266 in the Proceedings of the XXXVII Meeting of the Polish Astronomical Society
35. **Valluri, M.**, Loebman, S. R., Bailin, J., et al. 2015, “Stellar orbital properties as diagnostics of the origin of the stellar halo” arXiv:1510.06006 in: The General Assembly of Stellar Halos: Structure, Origin and Evolution Proceedings IAU Symposium No. 317, 2015, M. Arnaboldi, A. Bragaglia, M. Rejkuba & D. Romano eds,
34. **Valluri, M.** 2015, IAU General Assembly, 22, 2256134 “Using accurate phase space coordinates of 100,000 halo field stars to constrain the Milky Way halo”
33. **Valluri, M.** 2015, “Frequency maps as a probe of secular evolution in the Milky Way”, Highlights of Astronomy, 16, 349
32. McCord, K. M., Bailin, J., Croton, D., & **Valluri, M.** 2015, “Coupling Semi-Analytic Models and N-Body Simulations: A New Way of Making Galaxies and Stellar Halos”, American Astronomical Society Meeting Abstracts, 225, 143.01
31. **Valluri, M.** 2012, “Using frequency maps to explore the distribution function of the Milky Way stellar halo” in “Assembling the Puzzle of the Milky Way”, Le Grand-Bornand, France, Edited by C. Reyle; A. Robin; M. Schultheis, European Physical Journal Web of Conferences, 19, 2005
30. Freese, K., Ruiz, E., **Valluri, M.**, Ilie, C., Spolyar, D., & Bodenheimer, P. 2010, “Supermassive Dark Stars: Detectable in JWST and HST” arXiv:1006.5246, Proceedings of “First Stars and Galaxies” conference Austin TX, AIP conference series, Eds: Bromm, V., Yoshida, N., Whalen, D.

29. **Valluri, M.** & Debattista, V.P. 2010, “Unraveling the history of the Milky Way’s halo” , Bulletin of the American Astronomical Society (BAAS), Vol. 42, p.332, Proceedings of AAS Meeting #215, #321.01
28. Deibel, A. & **Valluri, M.** 2010 “The orbital structure of triaxial galaxies with figure rotation” , BAAS, Vol. 42, p.483, Proceedings of AAS Meeting #215, #458.05
27. **Valluri, M.**, Debattista, V. P., Quinn, T., & Moore, B. 2010, “New tools for probing the phase space structure of dark matter halos”, in “Hunting for the Dark: The Hidden Side of Galaxy Formation”, Malta, 19-23 Oct. 2009, eds. V.P. Debattista & C.C. Popescu, AIP Conf. Ser., Vol 1240, p. 395 (arXiv:1002.0640)
26. **Valluri, M.** 2009 “The phase space structure of dark matter halos with galactic disks”, AAS DDA, 40, 0703
25. **Valluri, M.**, Vass, I. M., Kazantzidis, S., Kravtsov, A. V., Bohn, C. L. 2007 “Relaxation in collisionless mergers”, AAS DDA, 38, 0503
24. Vass, I. M., **Valluri, M.**, Kazantzidis, S., Kravtsov, A. V., Bohn, C. L. 2005. “Violent relaxation and chaos in galactic mergers”. Bulletin of the American Astronomical Society 37, 1297.
23. Eftimova, M., & **Valluri, M.** 2003. “Tidal streams from dwarf spheroidal galaxies as diagnostics of the structure of the Milky Way halo.” BAAS 35, 1385.
22. Joseph, C. L., Merritt, D., **Valluri, M.**, & Olling, R., The STIS IDT Team 2001. “STIS kinematical results on galactic nuclei”. ASP Conf. Ser. 228: Dynamics of Star Clusters and the Milky Way 228, 464.
21. **Valluri, M.**, Joseph, C. L., Merritt, D. R., & Olling, R. O., STIS GTO Team 2000. “Dynamical modeling of M32 with stellar kinematics from STIS.” BAAS 32, 701.
20. Joseph, C. L., Merritt, D., Olling, R., & **Valluri, M.** 2000. “Kinematical results for NGC2841, NGC4552, and M87”. BAAS 32, 700.
19. **Valluri, M.**, & Merritt, D. 2000. “Orbital instability and relaxation in stellar systems”. The Chaotic Universe, Proceedings of the Second ICRA Network Workshop, Advanced Series in Astrophysics and Cosmology, vol.10, Edited by V. G. Gurzadyan and R. Ruffini, World Scientific, 2000, p.229 229.
18. Joseph, C. L., Merritt, D., Olling, R., & **Valluri, M.** 1999. “Kinematical black hole results for NGC2841, NGC4552, and M87”. BAAS 31, 1549.
17. **Valluri, M.**, Joseph, C. L., Merritt, D., & Olling, R., STIS Team 1999. “STIS observations of the center of M32”. BAAS 31, 1549.
16. **Valluri, M.** 1999. “Orbital structure of rotating triaxial potentials”. BAAS 31, 1225.
15. **Valluri, M.** 1999. “Figure rotation of triaxial galaxies: more chaos?.” ASP Conf. Ser. 182: Galaxy Dynamics - A Rutgers Symposium 182, 195.
14. **Valluri, M.**, & Merritt, D. 1999. “Torus Construction”. ASP Conf. Ser. 182: Galaxy Dynamics - A Rutgers Symposium 182, 178.

13. **Valluri, M.** 1999 “Rotating Triaxial Galaxies with Central Black Holes”. BAAS 31, 893.
12. Merritt, D., & **Valluri, M.** 1999. “Resonant Orbits in Triaxial Galaxies with Central Black Holes.” Bulletin of the American Astronomical Society 31, 893.
11. Olling, R., **Valluri, M.**, Joseph, C. L., & Merritt, D. 1999. “New Black Hole Results from STIS”. BAAS 31, 893.
10. Joseph, C. L., Merritt, D., Olling, R., & **Valluri, M.** 1999. “The Origin of the Black Hole in M87”. BAAS 31, 893.
9. Merritt, D., & **Valluri, M.** 1999. “Galaxy Dynamics: Conference Highlights”, Publications of the Astronomical Society of the Pacific Vol. 111, Issue 756, 247-248.
8. **Valluri, M.** 1999. “Dynamical Evolution of Bulge Shapes”. The Formation of Galactic Bulges, edited by C.M. Carollo, H.C. Ferguson, R.F.G. Wyse. Cambridge, U.K. ; New York : Cambridge University Press (Cambridge contemporary astrophysics), p.136.
7. Merritt, D., **Valluri, M.** 1998. “Self-Consistent Gravitational Chaos”. New York Academy Sciences Annals 848, 48-61.
6. **Valluri, M.**, & Sellwood, J. A. 1998. “Lopsided Disks in Lopsided Dark Halos. in Galactic Halos: A UC Santa Cruz Workshop, proceedings of a Conference held on the campus of UC Santa Cruz 11-15 August 1997 Edited by Dennis Zaritsky, ASP Conference Series #136, p. 376.
5. **Valluri, M.**, & Merritt, D. 1997. “The Onset of Chaos in Triaxial Stellar Systems”. BAAS 29, 795.
4. **Valluri, M.**, & Merritt, D. 1995. “Chaos in Triaxial Elliptical Galaxies”. BAAS 27, 1415.
3. **Valluri, M.** 1993. “A study of the environmental influences on spiral galaxies in clusters.” Bulletin of the Astronomical Society of India 21, 377-378.
2. **Valluri, M.** 1993. “Cluster tidal fields: Effects on disk galaxies.” Evolution of Galaxies and their Environment 242-243.
1. **Valluri, M.**, & Jog, C. J. 1990. “Collisional removal of HI from the inner disks of Virgo cluster galaxies”, IAU Colloq. 124: Paired and Interacting Galaxies 683-686.