

STEPHEN R. CASE

Historian of Science

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EDUCATION

PhD in the History and Philosophy of Science – August 2014

Dissertation title: “John Herschel’s Stellar Astronomy: Making Stars Physical, 1816–71”

University of Notre Dame, Notre Dame, Indiana

Master of Arts in Physics – December 2007

University of Mississippi, University, Mississippi

Bachelor of Science in Physical Science – May 2005

Minors: Mathematics & Writing

Summa Cum Laude

Olivet Nazarene University, Bourbonnais, Illinois

ACADEMIC POSITIONS

Olivet Nazarene University

- 2021–present Professor, Department of Chemistry and Geosciences
- 2016–2021 Associate Professor, Department of Chemistry and Geosciences
- 2014–2016 Assistant Professor, Department of Chemistry and Geosciences
- 2008–2010 Assistant Professor, Department of Physical Science

Mount Vernon Nazarene University

- 2016–2018 Adjunct Instructor, Graduate and Professional Studies (online)

Kankakee Community College

- 2009–2010 Adjunct Instructor, Math and Science Division

University of Mississippi

- 2008 Adjunct Instructor, School of Engineering
- 2007–2008 Fellow, Center for Math and Science Education
- 2005–2007 Fellow, NSF North Mississippi GK-8 Grant

Centre for Medieval & Renaissance Studies, Oxford, England

- 2004 Undergraduate Student Fellow, St. Michael’s Hall

ADMINISTRATIVE POSITIONS

Olivet Nazarene University

- 2026–present Director, Office of Undergraduate Research and Scholarship
- 2021–2025 Director, Honors Program
- 2016–2021 Associate Director, Honors Program
- 2008–2021 Director, Strickler Planetarium

PUBLICATIONS**Books:**

Celestial Bodies: Astronomy, Astrology, and the Story of the Heavens, Reaktion Books (forthcoming).

Creatures of Reason: John Herschel and the Invention of Science, University of Pittsburgh Press (2024).

Making Stars Physical: The Astronomy of Sir John Herschel, University of Pittsburgh Press (2018).

Edited Volumes:

with Lukas Verburgt, *The Cambridge Companion to John Herschel*, Cambridge University Press (2024).

with Marv Bolt, *Engaging the Heavens: Inspiration of Astronomical Phenomena V*, Astronomical Society of the Pacific (2012).

Research Articles:

“John Herschel’s Reform of Science,” *Physics Today* feature article (July 2023)

“A ‘Confounded Scrape’: John Herschel, Neptune, and Naming the Satellites of the Outer Solar System,” *Journal for the History of Astronomy* 50.3 (2019): 306–25.

“‘Land-Marks of the Universe’: John Herschel against the Background of Positional Astronomy,” *Annals of Science* 72.4 (2015): 417–34.

“How Bright Planets Became Dim Stars: Planetary Speculations in John Herschel’s Double Star Astronomy,” *Endeavour* 38 (2014): 27–34.

“‘These Divine Animals’: Physicality of the Stars in Platonic and Aristotelian Thought,” *Newberry Essays in Medieval and Early Modern Studies, Vol. 7: Selected Proceedings of the Newberry Center for Renaissance Studies 2013 Multidisciplinary Graduate Student Conference* (2013): 35–40.

“‘Insufferably Stupid or Miserably Out of Place’: Frederick A. P. Barnard and His Scientific Instrument Collection in the Antebellum South,” *Historical Studies in the Physical Sciences* 39.4 (2009): 418–43.

Popular Articles and Reporting:

“Learning to Love Monsters: A History of Windmills,” *Aeon Magazine* (July 2024)

“New Ceramic Material Offers Strength and Flexibility,” *Physics Today* (online news feature, 6 May 2024)

“A 3D Map of Galactic Magnetic Fields,” *Physics Today* (online news feature, 21 Feb 2023)

“Statistics Further Pushes the Limits of Optical Microscopy,” *Physics Today* (online news feature, 8 July 2023)

- “The Controversial Origins of Naming Moons,” *Physics Today* (online news feature, 3 May 2023)
- “Where God Dwelt: How Heaven Became a Place Among the Stars,” *Aeon Magazine* (December 2022)
- “Naming the Universe,” *Aeon Magazine* (February 2020)
reprinted in *American Scientist* (May/June 2020)
- with Tiffany Stone Wolbrecht, “Southern Skies: Astronomy in the Upside Down,” *The Planetarian* 47 (September 2018): 36–42.
- “Place of Departure: Careers in Discovery are not Constrained to Astronomers Alone,” *NSF National Radio Astronomy Observatory blog* (September 1, 2018).
- “Pierre-Simon de Laplace,” entry in *Dictionary of Christianity and Science* (Zondervan Publishing, Grand Rapids, MI: 2017).
- “Case for the Liberal Arts,” *Olivet: the Magazine* (Winter 2016).
- “Two Weeks in Italy Report: ‘Como Lo Sai?’ means ‘How do you know?’,” *The Planetarian* 45 (June 2016): 78–80.
- “Divine Animals: Plato, Aristotle, and the Stars,” *Mercury* 42.3 (Summer 2013): 28–33.
- “Evidential Reasoning in Astronomy and Cosmology: Some Reflections,” *History of Science Society Newsletter* 42 (Apr 2013): 32–34.
- “Children in God’s House: Teaching Cosmology at a Nazarene University,” in *Telos: the Destination for Nazarene Higher Education*, eds. Gregg A. Chenoweth and Barbara M. Ragan (Bourbonnais, IL, 2011): 58–61.

PRESENTATIONS

- “Colonial Skies: John Herschel, Colonialism, and the History of Astronomy” IAU Symposium 399: Indigenous Astronomies in the Space Age, Melbourne, Australia, 2025.
- Lightning talk: “Astronomy, Colonialism, and Coloniality” ASTRO ACCEL summit, Cape Town, South Africa, 2024.
- “John Herschel’s Enduring Legacy,” and “John Herschel’s Astronomy,” John Herschel: the last polymath public conference, Bath Royal Literary and Scientific Institution, Bath, 2024.
- Invited keynote address, “A Decade with the Correspondence of Sir John Herschel,” John Herschel correspondence digitization workshop, Royal Society, London, 2024.
- “Beyond the Shadow of the Telescope: Recontextualizing John Herschel” panel organizer and participant, History of Science Society Annual Meeting, Utrecht University, Netherlands, 2019.
- “Two Weeks in Italy Report,” Illinois State Planetarium Meeting, Triton College, River Grove, Illinois, 2016.
- “‘Land-Marks of the Universe’: John Herschel and Positional Astronomy,” Midwest Junto for the History of Science, University of Wisconsin, Madison, 2015.
- “Evidential Reasoning on the Nature of the Heavens in Early Astronomy,” ISLA-Mellon Conference Evidential Reasoning in Astronomy and Cosmology, University of Notre Dame, 2013.
- “Physicality of the Stars in Platonic and Aristotelian Thought,” Newberry Center for Renaissance Studies Multidisciplinary Graduate Student Conference, Chicago, 2013.
- “‘These Divine Animals’: Plato and His Commentators on the Stars,” Midwest Junto for the History of Science, Missouri University of Science and Technology, 2012.
- “John Herschel and the Beginnings of Double Star Astronomy,” History of Science Society Annual Meeting, Cleveland, 2011.

- “John Herschel and the Origins of Double Star Research: Proof, Parallax, and Planets,” Biennial Workshop on the History of Astronomy, University of Notre Dame, 2011.
- “Context and Perspective,” Faith and Science Symposium, Center for Faith and Culture, Olivet Nazarene University, 2009.
- “The F. A. P. Barnard Collection and Scientific Atmosphere in the South,” Southern History of Science and Technology Conference, Georgia Institute of Technology, 2008.
- “How Complete is Complete: Mechanics and the Millington-Barnard Collection,” Second International Scientific Instrument Collections in Universities Conference, University of Mississippi, 2007.
- “Strings and Things: String Theory, Astronomy, and the History of Science in the Classroom,” NASA Mississippi Space Grant Consortium Teacher’s Conference, Southern Mississippi University, 2007.

AWARDS AND FELLOWSHIPS

- Linda Hall Library residential research fellowship, 2025–26
- Samuel L. Mayhugh Award for Scholarly Excellence, 2022
- Craighton T. and Linda G. Hippenhammer Faculty Scholarship Grant 2021–22 (\$800)
- American Institute of Physics research grant, 2018–19 (\$2,500)
- Craighton T. and Linda G. Hippenhammer Faculty Scholarship Grant 2018–19 (\$2,000)
- Craighton T. and Linda G. Hippenhammer Faculty Scholarship Grant 2016–17 (\$1,400)
- *Annals of Science* 2014 Essay Prize for “‘Land-Marks of the Universe’: John Herschel against the Background of Positional Astronomy.”
- *Lenses of Faith: Resources for Research in Nineteenth-Century Astronomy* 2014–15 College of Arts and Science Grant (\$7,267)
- *Wandering Stars: Planetarium Travel Funds for Area Public School Groups* 2014–15 Olivet Community Outreach Grant (\$2,000)
- John J. Reilly Center 2014 Phillip R. Sloan Prize for Graduate Research
- Notre Dame Institute for Scholarship in the Liberal Arts Graduate Student Research Award, 2013 (\$2,495 research grant)
- Notre Dame Institute for Scholarship in the Liberal Arts Mellon grant for interdisciplinary workshop: Evidential Reasoning in Astronomy and Cosmology, 2012.

TEACHING EXPERIENCE

Olivet Nazarene University, 2008–present

- GEOL130: Introduction to Astronomy
- GEOL346: Tools of Astronomy & Planetarium Operations
- GEOL499: Topics in Astronomy
- HIST385: History of Science
- HONR110: Exploring Faith in Humanity
- HONR150: Human Disciplines
- HONR200: Humanity/Outside Influences
- HONR225: Issues in Society
- GNST 110: Freshman Connections
- Physical science lab supervisor
- PHYS121: College Physics I
- PHYS122: College Physics II
- ESS150: Planetary Astronomy

- ESS151: Stellar & Galactic Astronomy
- ESS370: Science in Society
- ESS380: Science and Theology in Dialogue

Mount Vernon Nazarene University, 2016–2018

- ESSC-1044-GN07O Astronomy With Laboratory (online)

Kankakee Community College, 2009–2010, 2012

- MATH1814: College Algebra
- PHYS2624: Physics II
- PHYS2625: Physics III

University of Mississippi, 2006–2007

- ENGN101: Introduction to Engineering
- Physics laboratory teaching assistant

SERVICE & PROFESSIONAL ACTIVITIES

- Co-convenor, History of Astronomy working group, Consortium for the History of Science, Technology, and Medicine, 2025—present.
- Dissertation Committee, Jeffery Stark, “Environmental Beliefs among Evangelical Leadership,” PhD in science education, Western Michigan University, 2023–2025.
- Wright in Kankakee, board of directors, 2025—present.
- City of Kankakee planning board, 2024—present.
- ASTRO ACCEL associate, 2024—present.
- Herschel Society Honorary Member, 2024—present.
- Co-organizer, John Herschel: the last polymath public conference, Bath Royal Literary & Scientific Institution, Bath, 2024.
- Editorial Board, *Christian Higher Education*, 2023—present.
- Parish Council member, Annunciation Greek Orthodox Church, 2018—present.
- Coordinator, Annual Faculty Writing Retreat, 2018—present.
- Facilitator, Faculty Writing Group, 2018—present.
- Editor, *ELALA: the Honors Journal of Olivet Nazarene University*, 2018—present.
- General Education Task Force Committee, Olivet Nazarene University, 2017–18.
- Faculty sponsor, Honors Student Council, 2015–2020.
- Advisory Committee, Center for Teaching and Learning, Olivet Nazarene University, 2014—present.
- Honors Council, Olivet Nazarene University, 2014—present.
- Notre Dame/Bielefeld University 2014 International PhD Student Workshop Exchange participant, Bielefeld, Germany
- ISLA-Mellon Workshop Organizer, University of Notre Dame, 2013
- Research and Curatorial Intern, Adler Planetarium & Astronomy Museum, 2012–2014.
- Organizing Committee, Biennial History of Astronomy Workshops, University of Notre Dame, 2011—present.
- Member, History of Science Society, 2008–2010, 2014—present.
- General Education Committee, Olivet Nazarene University, 2009–2010.
- Coordinator, Great Lakes Planetarium Association Illinois state meeting, 2009.
- Steering Committee, International Planetarium Society Conference, Chicago, 2008.