

# Dayna Thompson

## Planetarium Director

The Charles W. Brown Planetarium, Ball State University

### Education

#### 200-Hour Foundational Yoga Teacher Certification (CYT-200)

#### Social-Emotional Learning Facilitator Certification

Breathe for Change

#### Diversity and Inclusion Certificate

with classes on Improving Engagement & Fostering an Inclusive Climate

Cornell University, eCornell

#### Master of Science in Physics

Thesis: *Photometric Parallaxes and Subdwarf Identification for M-Type Stars*

Ball State University

#### Bachelor of Science in Physics

Purdue University Northwest

### Select Professional employment

#### Planetarium Director

July 2019 - Present

Department of Physics and Astronomy, Ball State University, Muncie, IN

#### Assistant Planetarium Director

Aug. 2012 - June 2019

Department of Physics and Astronomy, Ball State University, Muncie, IN

#### Graduate Assistant

Aug. 2010 - July 2012

Department of Physics and Astronomy, Ball State University, Muncie, IN

#### Limited Term Lecturer

May 2008 - May 2010

Department of Chemistry and Physics, Purdue University Northwest, Hammond, IN

#### Undergraduate Research Assistant

2006 - 2008

Department of Chemistry and Physics, Purdue University Northwest, Hammond, IN

### Funded grants

"The Great Solar System Adventure at the Brown Planetarium," Dayna Thompson, from the Indiana Space Grant Consortium (NASA), \$7,120, 2024. (pending)

"Creating a Cutting-Edge Experience: Upgrading the Charles W. Brown Planetarium's Projector Technologies," Dayna Thompson, J. Millis, from the Institute of Museum and Library Services: Museums for America, \$207,875, 2024. (pending)

"The 2024 Total Solar Eclipse at Ball State," Dayna Thompson, from the Association of Science and Technology Centers (ASTC) and the Simons Foundation Total Eclipse 2024 Funding Opportunity, \$10,000, 2023. (100%)

"The Charles W. Brown Planetarium: Expanding Engagement Opportunities Through Space and Time," Dayna Thompson, M. Isenbarger, B. Berrington, from the Institute of Museum and Library Services: Inspire! Grants, IGSM-251427-OMS-22, \$49,146, 2022. (100%)

"ASTRONAUT at the Charles W. Brown Planetarium," Dayna Thompson, from the Indiana Space Grant Consortium (NASA), \$10,000, 2019. (100%)

"To the Stars and Back: Exploring Our Planetary Backyard - Summer Science Camp for Middle School Girls at Ball State University and Pre-service Teacher Field Experience for Multicultural Education," S. Johnson, S. McDowell, P. Lang, C. Dowling, J. Bryan, Dayna Thompson, K. Rodgers, from the Ball State University Foundation \$15,000, 2017. (100%)

"Planet Nine at the Charles W. Brown Planetarium," Dayna Thompson, from the Indiana Space Grant Consortium (NASA), \$5,600, 2017. (100%)

"To the Stars and Back: Exploring Our Planetary Backyard - Summer Science Camp for Middle School Girls at Ball State University and Pre-service Teacher Field Experience for Multicultural Education," S. Johnson, S. McDowell, P. Lang, C. Dowling, J. Bryan, Dayna Thompson, K. Rodgers, from the Discovery Group (BSU), \$25,000, 2017. (100%)

"GIS Data to Planetarium Dome," K. Turcotte, Dayna Thompson, from the Indiana Space Grant Consortium (NASA), \$14,818, 2016. (100%)

"To Space & Back at the Charles W. Brown Planetarium," Dayna Thompson, from the Indiana Space Grant Consortium (NASA), \$6,150, 2016. (100%)

"The New Charles W. Brown Planetarium STEM Activity Stations 2014-15," Dayna Thompson, from the Indiana Space Grant Consortium (NASA), \$7,350, 2014. (100%)

**Selected Papers,  
workshops, and  
posters presented**

"JWST and the Total Solar Eclipse," Association of Lifelong Learners, Muncie, Indiana, February 2024. (Invited Talk)

"Astrophysics: Intro to General Relativity," Dayna Thompson, N. Terracciano, Curiosity, Confidence, Challenge: A Conference for Girls on Careers in STEM, Indianapolis, Indiana, January 2024. (Workshop)

"Awe & The Power of Visuals in Science Communication," Stars for All National Planetarium Conference, Kingsport, Tennessee, June 2023. (Paper)

"Awe & The Power of Visuals in Science Communication," Science Talk 2023, Portland, Oregon, April 2023. (Poster)

"Further Together: Finding Community Through Planetariums & Informal Learning Institutions," Dayna Thompson, Astronomical Society of the Pacific Summer Symposium, August 2022. (Workshop)

"Astrophysics: Intro to General Relativity," Curiosity, Confidence, Challenge: A Conference for Girls on Careers in STEM, Indianapolis, Indiana, March 2022. (Workshop)

"2021 IPS Culture and Climate Survey Report," S. Schmoll, Dayna Thompson, D. LeBlanc, The International Planetarium Society, 50 pp., February 2022. (Paper)

"What We Do Matters: Fostering Inclusion and Belonging in the Workplace," Dayna Thompson, 2nd Workshop on Astronomy Beyond the Common Senses for Accessibility and

Inclusion, Virtual via Zoom, November 2021. (*Paper*)

“Featured Variable Star Shorts and the IPS,” Dayna Thompson, Great Lakes Planetarium Association Annual Conference, Kalamazoo, Michigan, November 2021. (*Paper*)

“Masters of the Universe: Engagement,” Dayna Thompson, J. Fletcher, M. McConville, M. Smail, Dome Fest West, Costa Mesa, California, October 2021. (*Panel*)

“Challenges for Visualization in Immersive Planetarium Domes: Panel Session,” J. Faherty, C. Emmart, Dayna Thompson, R. Wyatt, A. Ynnerman, IEEE Viz Conference, Virtual via Zoom, October 2021. (*Panel*)

“Real People, Big Astronomy: Working in a Planetarium Panel,” G. Holt, R. Kerrigan, Dayna Thompson, Big Astronomy Webinar, Live on Facebook, October 2021. (*Panel*)

“Volumetric Models and Engagement,” Dayna Thompson, The e-Live, Interactive, Planetarium Symposium (e-LIPS), Virtual via Zoom, September 2021. (*Paper*)

“Grant Writing and Fundraising Panel,” D. Demeter, N. Gunter, Dayna Thompson, M. McConville, Z. Noyce, COSM’s LaunchPad Ground School, Virtual via Zoom, August 2021. (*Panel*)

“Astronomy Slam: The Update & Creative Constraints: Taking It Personally,” Dayna Thompson, Dome Dialogues One-Year e-Conference, Virtual via Zoom, March 2021. (*Paper*)

“Your Journey Through Space & Time,” Dayna Thompson, LSAMP Conference, Virtual via Zoom, October 2020. (*Paper*)

“Multidisciplinary Uses of the Dome,” J. Eakin, Dayna Thompson, A. Khazaei, International Planetarium Society 2020 Conference, Virtual via Zoom, August 2020. (*Panel/Paper*)

“Community Building Strategies,” Dayna Thompson, M. Smail, J. Wetzel, S. Fentress, International Planetarium Society 2020 Conference, Virtual via Zoom, August 2020. (*Panel/Paper*)

“The #YourUniverse Virtual Series at the Brown Planetarium,” Dayna Thompson, R. Williamson, II-WIMPS State Meeting, Virtual via Zoom, May 2020. (*Paper*)

“The International Planetarium Society’s Equity, Diversity, and Inclusion Committee,” Dayna Thompson, D. LeBlanc, Dome Dialogues e-Conference #7, Virtual via Zoom, April 2020. (*Paper*)

“The Brown Planetarium’s Astronomy Slam,” Dayna Thompson, The Inaugural Dome Dialogues e-Conference, Virtual via Zoom, March 2020. (*Paper*)

“Astrophysics: Intro to General Relativity Workshop,” Dayna Thompson, R. Williamson, Curiosity, Confidence, Challenge: A Conference for Girls on Careers in STEM, Indianapolis, Indiana, March 2020. (*Workshop*)

“The Value of Education in the Planetarium,” J. Bishop, M. SubbaRao, Dayna Thompson, S.

Shanks, Great Lakes Planetarium Association Annual Conference, Toledo, Ohio, October 2019. (*Panel*)

“Visualizing Experimental Cosmology,” Dayna Thompson, M. SubbaRao, Data to Dome Workshop, Hamilton, New York, October 2019. (*Session*)

“Data to Dome Day,” M. SubbaRao, Dayna Thompson, K. Davis, Live, Interactive Planetarium Symposium, Garden City, New York, August 2019. (*Workshop*)

**Fulldome  
planetarium  
productions**

“Variable Star Episodes,” Dayna Thompson, et al., 2021-2022.

“The Christmas Star,” R. Kaitchuck, Dayna Thompson, S. Sollars, R. Williamson, December 2016, updated 2021.

“Sunset Meditation,” Dayna Thompson, T. Hess, L. Mitchell, E. Hromi, P. Latus, A. McErlean, E. Peeler, September 2019.

“Educational NGSS Modules,” Dayna Thompson, B. Tilson, D. Brossard, R. Kaitchuck, April 2019.

“Juno @ Jupiter Modules,” Dayna Thompson, November 2018.

“A Satellite’s View: Intro to GIS Data,” Dayna Thompson, S. Vise, K. Turcotte, L. Mitchell, April 2017.

“Halloween: Celestial Origins,” Dayna Thompson, R. Hicks, J. Fillwalk, A. Kobitz, L. Mitchell, September 2016.

“Black Holes, Wormholes, & the Movies,” R. Kaitchuck, Dayna Thompson, S. Sollars, L. Mitchell, March 2016.

“Welcome to Our Solar System,” Dayna Thompson, L. Larson, K. Tynes, J. Conner, S. Vise, C. Snow, B. Conner, B. Short, M. Gabb, K. Skomer, L. Mitchell, February 2016.

“Tombaugh’s Planet,” R. Kaitchuck, Dayna Thompson, L. Mitchell, September 2015.

“Saturn & Beyond,” Dayna Thompson, M. Gabb, R. Kaitchuck, L. Mitchell, February 2015.

**Selected  
professional  
involvement**

Indianapolis Telescope Operator, NASA Live Broadcast, Jan. 2024 - April 2024.

Associate, International Astronomical Union, 2022 - present.

IPS Board Representative for North America, Jan. 2020 - Dec. 2022.

Co-Chair, IPS Equity, Diversity, and Inclusion Committee, Dec. 2019 - Jan. 2022.

Member, IPS Education Committee, January 2019 - present.

Practice Committee, Cornfed Derby Dames, July 2018 - July 2015.

League President, Cornfed Derby Dames, July 2016 - July 2017.

Role Model, FabFems Project, March 2016 - present.

Technology Chair, Great Lakes Planetarium Association, July 2015 - May 2018.

Member, International Planetarium Society (IPS), September 2015 - present. Fellow in 2024.

Member, Great Lakes Planetarium Association, October 2012 - present. Fellow in 2022.

Member, Museum Alliance (NASA), August 2012 - present.

**Selected  
University  
involvement**

Chair, Ball State Integrated Cultural Committee, 2020 - 2021; 2023 - 2024.  
Ball State Meditation Partnership, November 2017 - present.  
GIS Data to Planetarium Dome Research, 2015 - 2020.  
Immersive Learning in the Planetarium, 2014 - present.

**Selected awards**

Mentor Award, Great Lakes Planetarium Association, June 2023, for inspiring the next generation of planetarians.

Special Award, American Association of Variable Star Observers, Nov. 2021, for work and leadership done on the Variable Star Planetarium Show Project.

**Personal  
information**

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