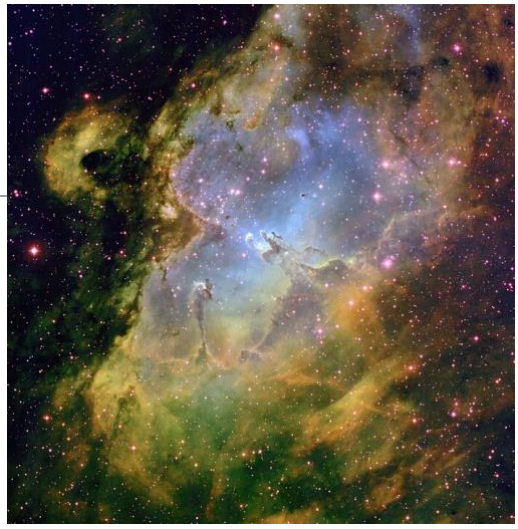
Hosted by the Department of Chemistry and Physics

What is a star-formation region, and what does it provide besides a pretty picture?

A colloquium sponsored by the Society of Physics Students

Dr. Matt Fleenor



Professor of Physics and Astronomy at University of Mary Washington

Star-formation regions (SFRs) provide some of the most stunning (and recognizable) images from space telescopes like Hubble, and now James Webb, but they also serve as popular targets for the general public. For what reasons do SFRs make such intriguing targets for telescopes? How do SFRs themselves form, and how do they fit into the stellar narrative of formation, maturity, and recycling? What can astronomers learn from these regions beyond just creating pretty pictures of the night sky? All of the above questions will be addressed in our time together according to the following plan: to begin, an introductory, comprehensive timeline is given, showing how stars (and star formation) fit into a cosmological narrative. Next, some physical mechanisms are introduced that relate particularly to SFRs, which make them so inviting as targets of interest (e.g., ionization and excitation). Lastly, quantitative estimates are drawn from the observations of SFRs, which better constrain our models and better inform our narratives.

Wednesday, November 2, 2022
4:00 PM EST in Jepson 225

Please contact SPS president Abby Swanson at aswanson2@mail.umw.edu with any questions!

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Open to all who wish to attend