

# Introduction to the Rubin Observatory and its Mission by Jim Sweitzer, PhD

**Will be presented at the Cernan Earth and Space Center at Triton College during the monthly meeting of the Chicago Astronomical Society on Saturday, September 6, 2025, at 6 pm. Admission is free, and the public is welcome. Telescope observing will be offered after the program, weather permitting.**

On June 23rd of this year, the Vera C. Rubin Observatory released its first test images to the public and stunned the world. In just ten hours, within a 15 degree field-of-view, it imaged millions of galaxies and discovered over two thousand new asteroids. Designed to gulp wide fields of view at once, it is very different from the narrow gazes of the JWST or Hubble Space Telescope. And, unlike most other observatories, its research will be driven by a 10-year mission to make essentially a time-lapse “movie” of the southern sky — the *Legacy Survey of Space and Time*.

Join me as I highlight the impressive engineering of the Rubin’s massive telescope and preview its fourfold scientific mission. I will focus on how it was designed primarily to map the dark matter structure of the nearby Universe and celebrate the groundbreaking research of its namesake, Vera C. Rubin. Finally, I will show how easy it is for anyone to access and explore the images themselves.

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## Our speaker will be Dr. Jim Sweitzer

If Jim Sweitzer were an astronomical body, he might be called a “rogue planet.” Unlike most folks who graduate from the University of Chicago with a PhD in Astrophysics, Jim chose to turn his expertise to public science education. His first job was with the Adler Planetarium in Chicago where he eventually became Assistant Director. U of C, however, lured him back to help manage the creation of their Center for Astrophysical Research in Antarctica, which found him twice at the South Pole.

Jim’s next adventure was warmer but equally challenging, directing the creation of the Rose Center for Earth and Space at the American Museum of Natural History in New York City. After its Millennial debut, Jim returned to Chicago to work for DePaul University’s Space Science Center, acting as liaison for NASA’s Space Science educational mission in a seven-state midwestern region. In 2004, Jim launched SCC, Science Communications Consultants, a firm that advises on the building and renovation of science museums around the globe, including the Shanghai Astronomy Museum, the largest in the world.

Jim is also an avid stargazer, delighting in his array of “smart telescopes.” He is the author of a book entitled “Dear Galileo, Letters from a Contemporary Astronomer to his Hero” and the writer of “SmartStars.blog,” helping stargazers appreciate more of what they see through their telescopes. A lover of the dark sky, Jim has recently served on the American Astronomical Society’s Committee for the Protection of Astronomy and the Space Environment (COMPASSE), devoted to protecting this vital resource. Throughout his career, Jim Sweitzer has shown that the sky is not the limit of our horizons, but the threshold to an amazing Universe we call home.



All images courtesy of the Vera C. Rubin Observatory