TEACHERS--You are invited to the 2018 Galaxy Forum

Current theory is that Jupiter formed just after our Sun. At one time Jupiter and the Sun were two big gaseous masses competing for dominance. The Sun exploded first....

To find out what happened next—come to the FREE **2018 Galaxy Forum to** be held at the Cosmosphere in Hutchinson on Saturday, August 11, 2018 from 1-3 p.m.

Eyes on Jupiter and the Sun

Purpose: To provide teachers with timely information to take back to the classroom on advances in the thriving field of solar system space exploration

Objectives:

Teachers will:

- 1. Be updated as to current scientific theory about the formation of our solar system.
- 2. Learn the latest discoveries concerning Jupiter.
- 3. Receive an overview of the Sun and its processes.
- 4. Be familiarized with the newest technologies being used to explore our solar system.
- 5. Be provided materials for classroom use.

Teachers can correlate with state science standards. Correlates to MS-ESS1-3, HS-ESS1-1, HS-ESS1-2, HS-SS1-3 Certificates of attendance will be available. Q and A after each presentation. Open to both students and teachers. Geared towards middle school on up.

This event is free of charge. Space is limited. To reserve seating and to help with count for materials preparation, send name, school and number attending to jeanettesteinert@att.net. Also, feel free to forward any questions to the same e-mail address.

BRIGHT IDEA: Also attend one of the Aug. 11 "**Space Next**" free documentary screenings for teachers provided by the Cosmosphere at 11 a.m. or 3 p.m. We will close out the Galaxy Forum at 2:50 to allow for teachers who want to attend the 3 p.m. showing. For more info, go to <u>cosmo.org/exhibitions/theater</u>

The Speakers and Topics:

"The Outer Planets in the Context of the Formation of the Solar System"

Dr. Thomas Cravens of the University of Kansas has a 30-year career in astrophysics. He has worked with NASA's Pioneer, Maven, Cassini and Juno missions, as well as theoretical modeling of atmospheres and ionospheres of Jupiter's and other planets' moons. Solar wind interaction with planetary bodies is another of his research specialties. He is author of the introductory textbook "Physics of Solar System Plasmas", published by the University of Cambridge, U.K.

"Exploration of Jupiter by Spacecraft including NASA's Juno Mission"

Stephen Houston, a Tribune native, earned a B.S. in physics from K-State in 2015. Currently a fourth-year grad student in space plasma physics at KU, Houston has been working with data from the Juno spacecraft ever since it arrived at Jupiter in 2016. Working with NASA and Johns Hopkins University Applied Physics Lab scientists on this project, his focus is data from the JEDI / JADE instruments, which sample electric fields, plasma waves and particles around Jupiter to determine how its magnetic field is connected to the atmosphere, and especially the auroras (Northern and Southern Lights).

"Exploration of the Sun inside and out"

Caleb Gimar, a Hutchinson native, earned his Bachelor's in physics at Wichita State University, and is now a grad student in physics there. He will speak on what we know, what we want to know about the sun and highlight two solar projects—the soon-to-be-launched Parker Solar Probe and a new NASA project awarded to WSU to design a neutrino spacecraft to study the sun's interior. Gimar is part of that design team.

The Ad Astra Kansas Foundation is a non-profit organization focused on promoting science in Kansas, especially the space sciences. This FREE educational event is sponsored by the Ad Astra Kansas Foundation to enrich science education in Kansas. Find us at www.adastra-ks.org and on Facebook.