Workshop Topic: From Earth to Interstellar Space!

Date: Saturday, 1/27/2018, 9:00 a.m.– 5:00 p.m. Location: Yerkes Observatory, Williams Bay, WI Presented By: Enterprise In Space Cost: \$75.00



The twin Voyager spacecraft left Earth 40 years ago and have opened our eyes to the amazing worlds found in our solar system. Each Voyager continues to sail over ten billion miles into interstellar space, an historical moment compared to Columbus stumbling onto America and Neil Armstrong's first footsteps on the Moon. Join us in a STEAM* workshop for K-12 teachers to discuss the continuing significance of this voyage as the final frontier is explored. Delve into this remarkable achievement and consider our place in the universe. Voyager carries a 'Golden Record,' a greeting for intelligent life that the ship may encounter thousands or millions of years in the future. What message would you have from the 'Pale Blue Dot'?

*STEAM - Science, Technology, Engineering, Arts, and Mathematics (This is a re-schedule of the Dec 2, 2017 Workshop)

Workshop Topics:

<u>Voyager History</u> – Information on the continued significance and trajectory of the amazing on-going Voyager Satellite Program, launched in 1977.

<u>Voyager Distance Modeling Activity</u>- A 2-D model to grasp the astronomical distances and logistics the 40-year Voyagers have sailed to get them 10 + billion miles from the Earth.

<u>Whispers from Space Lab</u>- Students will be given a mathematical model of how the Deep Space Network antennas work and how the antennas concentrate electromagnetic radio waves in a single direction.

<u>Golden Record Activity</u>- Each Voyager spacecraft carries a Golden Record, messages for intelligent life that might someday encounter the spacecraft. Participants collaborate in a STEAM activity to design a 21st Century message for extraterrestrials.

<u>Drake's Equation</u>- The statement, 'We are not alone!' is given some support through this mathematical and logical exercise to predict the possibility of extra-terrestrial intelligent life. Participants and their students will love this activity!

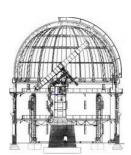
Yerkes Tour- Participants tour the historic and imposing Yerkes Observatory established in 1897.

(Wisconsin Tuition grants available through Wisconsin Space Grant Contact: education@enterpriseinspace.org for grant consideration.)

Register today: http://www.yerkesoutreach.org/january-27th-from-earth-to-interpriseinspace.org

<u>interstellar-space.html</u>

or: www.enterpriseinspace.org



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