



On **Monday, April 1st, 7:30 pm at SciWorks**, the Forsyth Astronomical Society is proud to welcome back, hometown astronomer Rick Kendrick!

Rick Kendrick has spent the last 30 years working in the Aerospace industry designing and building imaging systems. He is currently a Lockheed Martin Fellow at the Advanced Technology Center in Palo Alto, California. Rick has worked at Lockheed Martin for 22 years. He also spent time working for the Eastman Kodak Company, Hughes Aircraft Company, and the W.M. Keck Observatory in Hawaii. His current areas of interest include, imaging systems for space situational awareness, coronagraphic designs for exoplanet imaging and photonic planar lightwave circuits for interferometric imagers.

Rick has a Masters degree in physics from North Carolina State University and had his first experience freezing while looking at stars through a telescope in January of 1978 while attending Appalachian State University.

While Rick is here, he will be presenting a talk on topics of his current areas of research. These include:

1. A project involving professional and amateur telescope assets to track space debris and satellites, this is a project involving DARPA that seeks input from amateur astronomers. More information on this topic is available at: <http://www.spaceviewnetwork.com/>. Rick is just returning from a trip, this month, to Mauna Kea where he was involved in the use of the UKIRT (the world's largest infrared telescope, <http://www.jach.hawaii.edu/UKIRT/>). He plans to share these experience with us.
2. A project involving the use of the "Phase-Induced Amplitude Apodization (PIAA) coronagraph", an extremely sensitive instrument that "enables direct imaging and spectral characterization of exo-Earths (Earth-mass planets in the habitable zone of their stars) around nearby stars even with a relatively small aperture space telescope. In addition, such a telescope will also be great at imaging and characterizing larger planets and circumstellar dust disks." The discussion of the technical nature of The PIAA coronagraph should be of great interest to those interested in optics, amateur telescope making, and those interested in the "cutting edge" of exo-planet discovery techniques. There will be a pdf posted on the FAS website about this topic.
3. And finally a discussion of stellar interferometers he is involved in, being built for DARPA for a program called "Galileo" More information on this can be found at: [http://www.darpa.mil/our\\_work/tto/programs/galileo.aspx](http://www.darpa.mil/our_work/tto/programs/galileo.aspx)

Longtime FAS members will remember Rick's last presentation to the FAS in the early 90's, a stunningly insightful discussion of the state of the art in atmospheric turbulence cancelling technologies, presented to us a few years before this information was generally known. Rick was deeply involved in the development of these technologies. It was a cutting edge discussion then and promises to be this time as well. This is a rare chance to see and hear a hometown professional astronomer present very current topics from professional astronomy.