



**CASPER**



Baylor University and CASPER present:

# **Dr. Eric Davis**

Adjunct Professor, CASPER-EUCOS Group, Baylor University

Chief Science Officer, Institute for Advanced Studies at Austin

## ***A Strategic Roadmap for Commercializing Low-Cost Beamed Energy Propulsion Launch Systems***

**Abstract:** Beamed energy propulsion (BEP) using lasers or microwave generators to propel spacecraft promises to drastically improve the economics of space operations by sharply reducing the cost of reaching orbit. The Workshop to Commercialize Directed Energy Systems for Low-Cost Space Launches in April 2016 concluded no fundamental technological obstacles to commercial operations by the mid-to-late 2020s. Three emerging market drivers are transforming the demand for BEP's low-cost, small-payload, high-throughput model. Most prominent are launching cubesats, a market that did not exist until 2003, and supplying stock materials for 3-D additive manufacturing in space. BEP can also provide orbital debris mitigation, a growing threat to space operations, and inter-orbit propulsion.

**BIO:** Dr. Eric W. Davis is the Chief Science Officer of EarthTech Int'l, Inc. and the Institute for Advanced Studies at Austin in Austin, Texas; and he is the Owner/Chief Executive/Chief Scientist of Warp Drive Metrics which does consulting and contracting to the U.S. Departments of Defense and Energy. He is also an Adjunct Professor in the Early Universe, Cosmology and Strings Group at the Center for Astrophysics, Space Physics & Engineering Research at Baylor University in Waco, TX. His research specializations and interests include breakthrough propulsion physics for interstellar flight, interstellar flight science, beamed energy propulsion, advanced space nuclear power and propulsion, directed energy weapons, future and transformational technology, general relativity theory, quantum field theory and elementary particle physics, condensed matter physics, quantum gravity theories, experimental quantum optics, and SETI contact and xenoarchaeology.

**Friday, September 29, 2017, 2:30 p.m.**

**Baylor Research & Innovation Collaborative (BRIC) Room 2160**

**For more information, contact Sherri Honza at 254-710-1271**