UA Engineering Physicist Searches for Life in Jupiter’s Ocean

By Pete Brown - February 14, 2011, 10:44 am

G. Maxwell Yeager, who holds a PhD in engineering physics from the University of Arizona, is heading to Jupiter to oversee the construction in orbit of a submersible vehicle he designed with his graduate students.

The submersible can take a human crew of six to a depth of 1,000 kilometers in the Jovian ocean, where they can explore its depths for at least five days.

For now, Yeager and the Jupiter expedition are both fiction, the product of the fertile imagination of legendary science fiction author Ben Bova, who has a knack for predicting the future. In various writings, Bova predicted the space race of the 1960s, solar-powered satellites, and the discovery of organic chemicals in interstellar space.

Bova's prediction of Jovian exploration may not be that wide of the mark. UA Engineering professor Wolfgang Fink, of the department of electrical and computer engineering, will preface Bova's talk with a demo of self-guiding planetary exploration robots, which Fink believes could one day be used to explore our solar system. Of particular interest is Saturn's moon Titan, which because of its Earth-like characteristics is touted by scientists as a possible home for extraterrestrial life.

Ben Bova will be at the student union bookstore Feb. 15 to discuss his new book, Leviathans of Jupiter.

Bova's latest book is an adventure that centers around the ocean on Jupiter, which the author speculates is populated by leviathans, or enormous whale-like creatures. Could they be sentient? That's what the expedition seeks to discover.

Ben Bova

Photo by Kyle Cassidy
Bova is president emeritus of the National Space Society and a past president of Science Fiction Writers of America. He received the Lifetime Achievement Award of the Arthur C. Clarke Foundation in 2005 for "fueling mankind's imagination regarding the wonders of outer space." His 2006 novel, *Titan*, received the John W. Campbell Memorial Award for best novel of the year. In 2008 he won the Robert A. Heinlein Award "for his outstanding body of work in the field of literature."

**UA Student Union Bookstore (Downstairs) Program for Tuesday, Feb. 15, 2011**

3:30 p.m. – Demonstration of planetary exploration rovers outside bookstore, followed by video and talk by Dr. Fink.

4:30-6 p.m. – Book signing by Ben Bova and discussion of newest book, *Leviathans of Jupiter.*