

**8:30 – 8:55 a.m WELCOME AND INTRODUCTION, ARIZONA BALLROOM**  
**Thomas Sharp, Associate Director, ASU/NASA Space Grant, Arizona State University**

<b>TIME</b>	<b>SESSION A: Aerospace Cochise 212 Moderator: Ron Madler, ERAU</b>	<b>SESSION B: Astronomy and Space Physics Ventana 241A Moderator: Nadine Barlow, NAU</b>	<b>SESSION C : Earth and Environmental Science Ventana 241B Moderator: Michael Drake, UofA</b>	<b>SESSION D: Education and Public Outreach Ventana 241C Moderator: Barron Orr, UofA</b>
<b>9:00-9:10</b>	[A1] <i>Keenan Valentine</i> Structural Analysis of the 2009 ASCEND Unmanned Aerial Vehicle	[B1] <i>Mallory Vale</i> The Search for Planet Forming Regions in Young Binaries	[C1] <i>Brian Wheelwright</i> Techniques for Highly Deterministic Sampling of Attenuated Microwave Signals	[D1] <i>Chasity Locke</i> Embry-Riddle Virtual Airspace
<b>9:10-9:20</b>	[A2] <i>April Zuber</i> Aircraft Structural Engineering and Construction	[B2] <i>Jason Dittmann</i> The First Detection of a Starspot During Consecutive Transits of an Extrasolar Planet from the Ground: No Double Transiting Planet System Around TrES-1	[C2] <i>Corrie Hannah</i> Using Remote Sensing to Map and Manage Buffelgrass Infestations in Tucson and the Santa Catalina Mountains	[D2] <i>Andrew Kelley</i> NASA Space Grant Robotics Website
<b>9:20-9:30</b>	[A3] <i>Kyler Marutzky</i> Project AUAV: Autonomous Unmanned Aerial Vehicle	[B3] <i>Dillon Foight</i> Chromospheric Variability in Early F-type Stars	[C3] <i>Dimitri Ververelli</i> Global Monsoon Onset and Retreat based on Precipitable Water and Wind	[D3] <i>Richard Lucio III</i> Integration of the LEGO NXT Into Introductory Engineering Classes
<b>9:30-9:40</b>	[A4] <i>Ted Hench</i> ASU ASCEND: Arial Imagery and Camera Control	[B4] <i>Linda Henneberg</i> Modeling Spectra of Methane Ice in the Kuiper Belt	[C4] <i>Kyle Withers</i> Using Geophysical and GIS methods to develop a Hydrogeologic Framework for the Upper Santa Cruz River Basin	[D4] <i>Lila Burgos</i> Youth-driven Civic Engagement Facilitated by NASA Data and Collaborative Mapping
<b>9:40-9:50</b>	[A5] <i>Adam Ritchie</i> ERAU ASCEND! Overview	[B5] <i>Andrea Holmen</i> Vibrational Spectra of Solid Methane and Ethane: Astrophysical Implications	[C5] <i>Kyle Kryger</i> Ion Specific Exchange Membranes in Electrochemical Water Treatment	[D5] <i>Jennifer McNeil</i> Ethnogeologic Reconnaissance of the Hualapai Nation for the Trail of Time Project
<b>9:50-10:00</b>	[A6] <i>Nicholas Hammons</i> ASCEND! Structures	[B6] <i>Arron Shiffer</i> The Installation, Instrumentation, and Initial Testing of Northern Arizona University's Barry Lutz Telescope	[C6] <i>Arthur Ho</i> A Study of Endocrine Disrupting Compounds in Wastewater	[D6] <i>Stefanie Woodward</i> Community-based Drought Preparedness in Arizona: A Model for Climate Change Adaptation in the Developing World

<b>10:00-10:10</b>	[A7] <i>Geimi DeLarge</i> ERAU ASCEND! Data Acquisition	[B7] <i>Edward Montiel</i> Exploring the Gamma-Ray/Optical Connection in Blazars	[C7] <i>Ramsey Coronado</i> A Near-Bed Study on the Affects of Spur Dikes on River Systems	[D7] <i>Erin Boyd</i> Empowering Youth: From Learners to Leaders through Community Asset Mapping
<b>10:10-10:20</b>	[A8] <i>Andrew Grant</i> Attitude and Motion Determination	[B8] <i>David Schenck</i> <i>Characterizing Class 0 Protostar 9 mm Emission</i>	[C8] <i>Aaron Khan</i> FISH Probe Analysis of Polytene Chromosome Separation	[D8] <i>Allison Clark</i> Saving Space: Preserving and Promoting Historic NASA Documents and Images in the USGS Astrogeology Branch
<b>10:20-10:35</b> <b>TIME</b>	<b>SESSION A: Aerospace (continued)</b> <b>SESSION E. Exploration Systems I Cochise 212</b> <b>Moderator: Jack Crabtree, ANSR</b>	<b>SESSION B: Astronomy and Space Physics (continued)</b> <b>SESSION F: NASA Technology Ventana 241A</b> <b>Moderator: Kristopher Anderson, NAU</b>	<b>SESSION C: Earth and Environmental Science (continued)</b> <b>Ventana 241B</b> <b>Moderator: Tom Sharp, ASU</b>	<b>SESSION D: Education and Public Outreach (continued)</b> <b>SESSION G: Planetary Science Ventana 241C</b> <b>Moderator: Greg Mehall, ASU</b>
<b>10:35-10:45</b>	[A9] <i>Shean Howlett</i> SMCC ASCEND Team: Building a Better Payload	[B9] <i>Felicia Werchan</i> Structural Parameters of the Large Magellanic Cloud	[C9] <i>Joseph Murray</i> Elemental and isotopic composition of hot spring biofilms from Yellowstone National Park	[D9] <i>Sean Malley</i> Incremental Improvements to the Web User Experience
<b>10:45-10:55</b>	[A10] <i>Stephanie Lengyel</i> University NanoSat Competition - Project Overview	[B10] <i>David Blyth</i> Model Spectra of Composite Stellar Populations: Toward Better Templates for Cosmological Studies	[C10] <i>Selisa Rollins</i> Transport of Elements in the Yellowstone Hydrothermal System	[D10] <i>Paula Landry</i> Phenology Education
<b>10:55-11:05</b>	[A11] <i>B</i>	[B11]	[C11]	[D11]

11:15-11:25	[A13] <i>Seth Guberman</i> ERAU NASA/LSU HASP Payload Submission Hatchling I	[B13] <i>Adrian Lizarraga</i> Recommissioning the Steward Observatory Student Radio Telescope	[C13] <i>Leonard Cratic</i> Soil Aggregate Stability in the Loamy Uplands	[D13] <i>Lauren Puglisi</i> Mars Education
11:25-11:35	[A14] <i>Stacy Harrison</i> Measurement of Extraterrestrial Constants	[B14] <i>Melissa Revelle</i> Polarizability Measurements of the Alkali Metals Using Atom Interferometry	[C14] <i>Zachary Dean</i> Solute Mixing at Junctions in Water Distribution Piping Networks and Pressurized Pipe Systems	[D14] <i>Kevin Martinez</i> Robotics in the Classroom
11:35-11:45	[A15] <i>Christopher Miller</i> Measurement of Extraterrestrial Constants	[B15] <i>Albert Delp</i> A Swooper for the Snap-12 Protocol	[C15] <i>Jasmine McBeath</i> Studying Treeline to Improve Bioclimatic Models	[D15] <i>Magdalena Medina</i> Mars Robotics Curriculum using "Shared World" Views
11:45-11:55	[A16] <i>Ross Verrein</i> Measurement of Extraterrestrial Constants	[B16] <i>Ian Williams</i> Matroids and Hyperplane Arrangements (Part I)	[C16] <i>James Mack</i> LiDAR Forest Mapping	[G1] <i>Richard Nava</i> Using Distributional Characteristics of Superposed Large-Scale Crater Clusters as Temporal Indicators of Geologic Processes
11:55-12:05	[A17] <i>Matt Bunting</i> Satellite Tracking System	[B17] <i>Christin Bibby</i> Matroids and Hyperplane Arrangements (Part II)	[C17] <i>Jarret Childers</i> The Effects of Elevated Carbon Dioxide on Microarthropod Abundance and Community Structure	[G2] <i>Rebekah DeVries</i> Central Pit Craters in the Southern Hemisphere of Mars
12:05-12:15	[A18] <i>Daniel Rainey</i> Mobile Tracking System	[F1] <i>Corey Casado</i> Astronaut Robot Mission Simulation	[C18] <i>Jason Browne</i> Mycorrhizae Diversity and Abundance along a Hybridization Gradient in Pinyon Pine Trees	[G3] <i>Jessica Kaminski</i> Mini-TES Targeting Database for MER Opportunity
12:15-12:25	[A19] <i>Michael Veto</i> Systems Engineering of the ASU/NASA Space Grant Robotics Team	[F2] <i>Jennifer Stanley</i> Facilitating Online Learning of Geospatial Technology for Mapping Invasive Species	[C19] <i>Mateo Hernandez</i> Trace Element Composition of Rainwater and Surface Runoff within Central Arizona	[G4] <i>Sean Marshall</i> Analyzing Shutter Closing Times for THEMIS IR
12:25-1:25	<b>LUNCH, ARIZONA BALLROOM</b>			

<b>TIME</b>	<b>SESSION E: Exploration Systems I</b>  <b>Cochise 212</b> <b>Moderator: Ron Madler, ERAU</b>	<b>SESSION F: NASA Technology (continued)</b> <b>SESSION H: Exploration Systems II</b> <b>Ventana 241A</b> <b>Moderator: Barron Orr, UofA</b>	<b>SESSION C: Earth and Environmental Science (continued)</b> <b>Ventana 241B</b> <b>Moderator: Chandra Holifield Collins, USDA</b>	<b>SESSION G: Planetary Science (continued)</b>  <b>Ventana 241C</b> <b>Moderator: Dante Lauretta, UofA</b>
<b>1:25-1:35</b>	[E1] <i>Seg Jaucian</i> Catalog Server	[F3] <i>Martha Mosqueda</i> Using Geospatial Technology and Collaborative Mapping in Vulnerable Populations to Promote Physical Activity	[C20] <i>Justin Nixon</i> Analysis of VSEPÂ® for Brine Minimization/Salt Management	[G5] <i>Ruben Rivas</i> Lava Flows of Arsia Mons, Mars
<b>1:35-1:45</b>	[E2] <i>Allison Villa &amp; Joseph Caglio</i> High Speed Self-Correcting Circuit for Space Applications	[H1] <i>Malcolm Gibson</i> Novel Extrusion System for the Encapsulation of Drug-Releasing Bio-Medical Micro-Robots	[C21] <i>Gabriela Montanez</i> Cadmium isotope fractionation during adsorption onto manganese oxides	[G6] <i>Colin Ho</i> Creating a circum-Mars visual transect around the equatorial region using the Thermal Emission Imaging System
<b>1:45-1:55</b>	[E3] <i>Joseph Caglio</i> High Speed Self-correcting Circuit for Space Applications	[H2] <i>Jillian Urban</i> Using two-dimensional edge detection to produce three-dimensional medical prototypes from MRI data	[C22] <i>Luke Hanna</i> The Effect of Cottonwood Hybridization on Litter Dwelling Beetles	[G7] <i>Leon Manfredi</i> Age Estimates for the Circum-Hellas Volcanic Province, Mars
<b>1:55-2:05</b>	[E4] <i>Samantha Draper</i> VICAR Java ImageIO Plug-In Project	[H3] <i>Megan Alexander</i> Biomechanical Response of the Recurrent Laryngeal Nerve in Piglets	[C23] <i>Kayla Peck</i> Analysis of Infection by Trypanosoma Cruzi, Causative Agent of Chagas Disease, in Populations of Triatomine Insects from Southern Arizona	[G8] <i>Eric Betz</i> Determining the Heights and Distributions of Swiss Cheese Features on the Martian South Polar Residual Cap
<b>2:05-2:15</b>	[E5] <i>Alexandru Dospinoiu</i> Mass Spectroscopy & NMR Analysis of Polyester and Polyether Polymers	[H4] <i>Robbia Hendrix</i> 2D Kinematics Locomotion System to Analyze Effects of Therapy in Spinal Cord Injury Rodent Models	[C24] <i>Paul Rheinheimer</i> Characterization of Wind Blown Mine Tailings Dust in Arizona	[G9] <i>Adriana Riggs</i> Topography of Chaotic Terrain on Europa
<b>2:15-2:25</b>	[E6] <i>Niket Thakkar</i> The Effect of Aperture Shape on Lau Interference Fringes with Visible Light and Electron Waves	[H5] <i>Jared Bartell</i> Effects of Therapy on Sensorimotor Function in a Spinal Cord Injured Rodent Model	[C25] <i>Natasha Sinha</i> Nonylphenol Degradation-Influence of Nitrifying Bacteria	[G10] <i>Christian Alf</i> Lunar Reconnaissance Orbiter
<b>2:25-2:35</b>	[E7] <i>Kyle Stephens</i> Heat Dissipation Analysis on Sunlight Concentrator	[H6] <i>Kristen Boyer</i> Promoting Plasticity; Horizontal Ladder Assessment	[C26] <i>Charlene Estrada</i> The Correlation of M-O Bond Length to Raman Stretching Frequency in Mineral Anionic Groups	[G11] <i>Courtney King</i> Analysis of Partial Melting in CR and R Chondritic Meteorites

2:35-2:45	[E8] <i>Alberto Arvayo</i> Development of Photovoltaic Concentrator for Solar Power	[H7] <i>Akshay Sriprasad</i> Engineering Biosensors for the Sensitive Detection of Proteases	[C27] <i>Michael Fruchtmann</i> Simulation of the Late Permian with CCSM3	[G12] <i>Kaylan Meinecke</i> Lunar Mineralogy
2:45-2:55	[E9] <i>Tony Merrell</i> Multi Walled Carbon Nanotube Optimization for use in Fuel Cells	[H8] <i>Yee Tchao</i> E-beam Size-Dependent Self-Assembly Protein Array	[C28] <i>Michael Fancher</i> Strontium as a Geo-Locator	[G13] <i>Steven Forbes</i> Fuzzy-Based Inference System for Navigation and Life Detection on Titan
2:55-3:05	[E10] <i>Sarah Brown</i> Improvements in Solar Energy Collection (Part I)	[H9] <i>Rodrigo Lopez</i> Photolysis Process for the Oxidation of Endocrine Disrupting Compounds in Water	[C29] <i>Carmen Parks</i> Thermal Infrared Multispectral Scanner (TIMS): Remote Sensing Techniques and Geologic Applications (Part I)	[G14] <i>Katrina Jackson</i> Volatile Element Compositions of Minerals in Meteorites
3:05-3:15	[E11] <i>Michael Ross</i> Development of Concentrator Photovoltaic for Solar Electricity (Part II)	[H10] <i>Vanessa Gutierrez</i> Protein modifications with polyethylene glycol (PEG) for long-term space exploration	[C30] <i>Jeffrey Bickel</i> Thermal Infrared Multispectral Scanner (TIMS): Remote Sensing Techniques and Geologic Applications (Part II)	[G15] <i>Jordana Friedman</i> Discussion of High Thermal Inertia Craters on Mars in the Isidis and Syrtis Major Regions
3:15-3:30	<b>JOIN US FOR REFRESHMENTS IN THE ARIZONA BALLROOM</b>			

# Memorial Union 2nd Floor

rev. July 2008

