

Montana Space Grant Consortium Student Research Symposium: Talks

1	Environmental & Earth Sciences	Remote Sensing	Physics
Start 8:30	Amber Walter, UMW, "Historic Climate Change at Ennis, Montana"	Luke Humphrey, MSU, "CHAOS: Mechanical design of a controllable, high-altitude experiment platform"	Nicholas Childs, MSU, "Electronic Current Distribution in a Ni-YSZ Solid Oxide Fuel Cell Anode"
	Jeremiah Hill, UMW, "Historic Climate Change in Northwestern Montana: Trends in Average Temperature and Total Precipitation"	Sam Sorensen, Nathan Little, MSU, "BOREALIS Weather Station"	Steven Barton, Richard Shular, Matt Barton, Bryan Peterson, Frank Kestner, MSUB, "Two-Photon Laser Induced Fluorescence of Atomic Sodium"
	Douglas Brinkerhoff, UM, "Sensitivity of the frozen-melted basal boundary to perturbations of basal traction and geothermal heat flux: Isunnguata Sermia, western Greenland"		
	Adam Gunderson, MSU, "An Investigation of Cloud Cover Probability for the HypsIRI Mission Using MODIS Cloud Mask Data"	Christopher Kellogg, Tech, "Satellite Based Elevation Gradient Monitoring of Vegetation Responses to the Three Gorges Dam Construction"	Kevin Lalli, Page Bailey, Geoff Whitt, Tyler Huffman, MSU, "Student Feedback on the IRIS Student Spectrograph Competition 2010-11 Pilot Run"
End 9:45	Jonathan Four Colors, SCC, "Recording and calibrating soil moisture contents using Gypsum soil moisture probes"		

2	Ballooning	Biology & Chemistry	Education & Outreach
Start 10:30	Abby Thane, UM, "The Implications of Increased Sounding Data"	Kristen Crandell, UM, "Unsteady Aerodynamics in Avian Flight"	Kathryn Williamson, MSU, "Introductory Astronomy Student Understanding of Gravity"
	Drew Moen, MSU, "Transformer of Energy from Atmospheric Resistance"	Joshua Beaulaurier, UGF, "Commercially made fish feeds could potentially contain pathogens and have different growth rates on P.Herring"	Lucas Jones, UM, "Capturing the Probabilistic Nature of Light for Undergraduate Astronomers"
	George Council, MSU, "Real-Time Remote Control of BOREALIS Systems with a Focus on Implementing a Cutdown Method"	Trista Vick, MSU, "Life in the cold and dark: carbon cycling in ice-covered Antarctic lakes"	Katherine Kalachev, UM, "Montana's new advanced observational astronomy lab course."
	David Riesland, Joe Lutgen, MSU, "Zero Pressure Ballooning: Cutdown"	Shane Nowack, MSU, "Modeling Niche Partitioning of Synechococcus Species in Yellowstone Hot Spring Microbial Mats"	Casey Kanode, Kate Webbink, MSU, "SPOT, the Gadget Generation, and Picturing Science-Oh My!"
End 11:45		Nathaniel Windy Boy, SCC, "Field Bindweed and Canadian Thistle Experiment"	

3	Astronomy & Space Physics	Computing & Aerospace	Engineering
Start 1:30	Sofia Tanberg, UM, "The Terrestrial Magnetopause and Bow Shock: A Comparison of New Data to Existing Models"	Celena Byers, MSU, "Explorer-1 [PRIME]: Montana's First Satellite"	Adam Gunderson, MSU, "Designing a University CubeSat Radio Using Commercial Off the Shelf Parts"
	Courtney Peck, MSU, "Determining the Relationship Between Cosmic Rays and Our Atmosphere"	Clinton Hadwin, MSU, "Cube Satellite Fabrication, Integration, and Systems Testing"	David Driscoll, MSU, "Investigation of Engineered Pore Structures in Powdered Metals by Means of Freeze Tape Casting"
	Judy Hudgins, Ryan Young, Tashina Russette, Tyler Huffman, SKC, SKC, SCC, MSU, "Aurora Borealis trip to Poker Flat Research Range in Alaska"	Jennifer Hane, MSU, "Redundant Binary Counter System with Scrubber"	Allen Ream, MSU, "Statistical Qualification of Stereopsis and Color Correction for Stereo-Endoscopy"
		Matt Voll, MSU, "Power System Design Considerations for Small Satellites"	Justin Krohn, Charlie Ferguson, Chad Willett, Donovan Ferrin, Terrell Thomason, Joe Stack, Steve Lobst, Kris Bengtson, MSU, "Design of a Robotic Lunar Regolith Excavator"
End 2:45		Dan Schwendtner, MSU, "Development of a Thermal Vacuum System for Spacecraft Environmental Testing"	

Montana Space Grant Consortium Student Research Symposium: Posters

First name	Last name	Institution	Department	Title
Matthew	Barton et al	MSUB	Physics	Two-Photon Laser Induced Fluorescence of Atomic Sodium
Timothy	Brox	MSU	Physics	Nuclear magnetic resonance study of polycrystalline ice
Benjamin	Gilboe	UMW	Biology	Characterization of the Borrelia burgdorferi Bb0769 ORF
Adam	Gunderson	MSU	Electrical and Computer Engineering	VSWIR Solar Calibration
Ryan	Hannahoe	MSU	Education	Turning Eyes to the Big Sky Project
Travis	Harrer	MSU	Chemical Engineering	Microbially Induced Calcium Carbonate Precipitation Under Radial Flow Conditions
Saiichi	Hashimoto	MSU	Computer Science	Routing and Adaptive Power Control for Green Networking
Josi	Herron	UGG	Biology	Water Quality Analysis of Heavy Metals As, Cd, Cu, Pb, and Hg from Etang Saumatre lake in Haiti
Ed	Jones	CDKC	Science	Soaring to New Heights: Tethered Blimp Technology at Chief Dull Knife College
Kendra	Kaiser	MSU	Land Resources and Environmental Science	Ecohydrology: Disturbance and the intersection of vegetation pattern and landscape structure
Amanda	Kortum	UMW	Biology	Characterization of the Candida albicans Sec63 Protein
Kevin	Lalli	MSU	Physics	National Student Solar Spectrograph Competition
Chandra	Macauley	MSU	Chemical and Biological Engineering	The influence of CrxOy microstructure on the oxidation behavior of CoMn coatings on SOFC/SOEC interconnects
Rebecca Deborah	Millsap Ross	UM	Geosciences	RIMM-CAPP (Ripple Mark Mapping - Camas Prairie Project)
Lars	Osborne	MSU	Mechanical Engineering	Distributed Swarming Robotic System
Briana	Peck	UM	Physics and Astronomy	Measurement of the Pulse Duration of an Ultrafast Laser
Meredith	Rainey	MSU	Ecology	Exploring the use of MODIS data to improve prediction of wildlife corridors and enable prediction under climate change
Russell	Ricker	MSU	Physics	Investigation into the Growth of Calcium Sulfate Crystals
Deborah	Ross	UM	Physics and Astronomy	RIMM-CAPP (Ripple Mark Mapping - Camas Prairie Project)
Deia	Schlosberg	MSU	Science and Natural History Filmmaking	Communicating Science: Using Film to Bridge the Gap
Jeremy	Schwend	MSU	Physics	Finding deviations from General Relativity using gravitational waves
Nicholas	Silverman	UM	Geosciences	Calibration of Vegetation Parameters within an Ecohydrologic Model using Remote Sensing Techniques
Matthew	Urschel	MSU	Microbiology	Dissimilatory iron reduction in subzero brines
Geoffrey	Wicks	MSU	Physics	Sub-Surface CO ₂ Concentration Measurement Using a Fiber-Based Sensor in a Call/Return Geometry for Carbon Sequestration Site Monitoring

BCC=[Blackfeet Community College](#), CC=[Carroll College](#), CDKC=[Chief Dull Knife College](#), DCC=[Dawson Community College](#), FVCC=[Flathead Valley Community College](#), FBC=[Fort Belknap College](#), FPCC=[Fort Peck Community College](#), LBHC=[Little Big Horn College](#), MCC=[Miles Community College](#), MSUB=[Montana State University - Billings](#), MSU=[Montana State University - Bozeman](#), MSUN=[Montana State University - Northern](#), Tech=[Montana Tech](#), RMC=[Rocky Mountain College](#), SKC=[Salish Kootenai College](#), SCC=[Stone Child College](#), UGF=[University of Great Falls](#), UM=[University of Montana - Missoula](#), UMW=[University of Montana - Western](#)