Schedule of Events

Thursday, April 3
Arizona Ballroom A (North)
Memorial Student Union

8:00 AM  Coffee & Pastries
8:15  GeoDaze Welcome

Session I: Structural and Economic Geology

Session Leaders:

8:30  Scott McBride
Extensional Tectonics of the Cretaceous Pirgua Subgroup, NW Argentina

8:45  Alex Strugatskiy
Structural Reconstruction and Reinterpretation of the Area near Happy Valley, Little Rincon Mountains, Southeastern Arizona

9:00  Rory San Filippo
Timing and Kinematics of the Bitter Spring Valley Fault and Related Syn-Extensional Strata, Lake Mead Extensional Domain, Nevada

9:15  Christian Ríos Vargas
The Geology of Santa Ana, A Newly discovered epithermal silver deposit, Puno Province, Peru

9:30  Francisco Quintanar
The Herradura mine, an Orogenic gold deposit in northwest Mexico

9:45  Break

Session II: Planetary Geology

Session Leaders:

10:00  Tamara J. Goldin
Deposition of Distal K/T Ejecta via Density Currents

10:15  Kelly J. Kolb
Modeling Recent Flows on Mars in Search of Evidence for Liquid Water

10:30  Kathryn G. Gardner-Vandy
Melting on FeO-rich Asteroids: A Link to the FeO-rich Primitive Achondrites
10:45  **Priyanka Sharma**  
Constraints on Titan's topography through fractal analysis of shorelines

11:00  **Colin Dundas**  
HiRISE Observations of Fractured Mounds in the Martian Mid-Latitudes

11:15  **Break**

**Session III: Geophysics/Geodesy**

**Session Leaders:**

11:30  **Jennifer L. McGraw**  
Determining relative motion across the Gulf of California

11:45  **Austin A. Holland**  
Analysis of resolution for a technique to determine time-variable crustal velocity using Continuous GPS Time-Series

12:00  **Joshua C. Spinler**  
Monitoring evolution of Pacific-North America plate boundary through GPS observations, southern California

12:15  **M. Soledad Velasco**  
Fault geometries and upper crustal extension in the Eastern Basin and Range, Western U.S.

12:30  **Lunch Break**

1:30-3:30 PM  **Session IV: Posters**

**Geophysics**

1  **M. Serkan Arca**  
Seismic Reflection Imaging of a Breakaway Zone: A New Look at Core-Complex Development in Southeast Arizona

2  **C. Berk Biryol**  
Preliminary Results from North Anatolian Fault Passive Seismic Experiment: Anisotropy

3  **Andy Frassetto**  
Thickness, composition, and fabric of the crust throughout of the Sierra Nevada from teleseismic converted waves

4  **Christine Gans**  
Insights Into the Crust and Upper Mantle Structure Beneath North-Central Turkey Using Regional Waveforms

5  **Ryan Porter**  
Exploring Extension: Crustal and upper mantle structure in the Basin and Range

6  **Hande Tok**  
The SIEMBRA Array: Exploring Flat Slab Subduction

7  **Andrew McCallister**  
Preliminary Results from North Anatolian Fault Passive Seismic Experiment: S-wave receiver function analysis

8  **Investigation of the San Andres Fault: GPS monitoring of San Gorgonio Peak**
Structural and Stratigraphic Characteristics of the Heidrun Oil Field from Analysis of 3-D Seismic Data

Eric Flood

A new global plate velocity solution

Philip J. Stokes

Combining geophysics and homicide: Ground penetrating radar investigations of a possible homicide burial site in the Arizona desert

Shoba Maraj

Teapot Dome 3-D Seismic Interpretation Project

Paleontology, Paleoclimate, and Fire History

Derek Hoffman

Extinction patterns in molluscan communities of the Florida Neogene: Effects of sampling and evenness

Robert D. Dietz

Nitrogen isotopes in bivalve shells from the Colorado River estuary: Evaluating a proxy for changes in nutrient delivery

Alison Drain

Intercomparison of IPCC Coupled Climate Models’ Antarctic Sea Ice Predictions and Implications for Penguin Habitat

Morgan Helfrich

Physical evidence of deforestation along a modern rift lake: an on land and nearshore comparative study between two watersheds at Lake Tanganyika, Tanzania

Chris Johnson

Fire and Water: Wildfire frequency and climate change in East Africa over the last four centuries using paleolimnological techniques at Lake Tanganyika, Africa

Margaret Blome

A Synthesis of African Paleoclimate And Possible Implications for Middle Stone Age Archaeology: 150ka-35ka

Lombardo, Keith

Preliminary results from a multi-century reconstruction of Chaparral fire history in Southern California.

Hydrology

Stephen Osborn

Fluid and Gas Geochemistry of Upper Devonian Organic-Rich Shales, Northern Appalachian Basin

Candice B. Adkins

Investigating Ground-Water Movement Using Diverse Water Chemistries in the San Pedro Basin, Arizona

Jessica Driscoll

Evolution of Flowpaths in an Alpine Watershed of the Colorado Front Range, USA

Geochemistry, Geochronology, & Tectonics
Robinson Cecil
Innovations in K-Ca Geochronology using MC-ICP-MS and Applications to Sedimentary Dating

Lisa Molofsky
Application of U-Pb Geochronology to questions in Old World Archeology

Douglas C. Kreiner
Minor element compositions of pyrite and epidote-group minerals from IOCG deposits, Copiapo, Chile

Whitney Rutherford
Proterozoic paleogeography and stratigraphy of the eastern Nevada and southern Idaho miogeocline

Session V: Geophysics/ Seismology

Session Leaders:

3:30 PM  Anna Szidarovszky
Identification of Unexploded Ordnance from Clutter Using Neural Networks

3:45  Jason A Stein
Analysis and Interpretation of 3-D Seismic Data, Kevin Dome, Central Montana

4:00  Lepolt Linkimer
Crustal Thickness and Depth to the Subducting Slab Underneath Northern Costa Rica based on Receiver Function Analysis

4:15  Berk Biryol
Source Rupture Process of the Solomon Islands Earthquake of April 1, 2007 Inferred from Teleseismic Body Waves

4:30  Andy Frassetto
Flowing Asthenosphere and a Slab Window beneath the Coast Mountains Batholith, British Columbia

End of Thursday’s GeoDaze activities
Friday, April 4
Arizona Ballroom A (North)
Memorial Student Union

8:00 AM Coffee & Pastries
8:15 Welcome and Announcements

Session VI: Paleoclimate, Biogeochemistry, Geomorphology, and Geoscience Education

Session Leaders:

8:30 Mark Howe
Teaching physical Geology to the visually disabled: A revised lab manual and teaching guide

8:45 Angel Otárola
The impact of turbulence on determining climate via radio occultation? Performance of ATOMMS under the effect of Atmospheric Turbulence

9:00 Alysha Coppola
Tropical Sea Surface and Salinity During Deglaciation Inferred From a new Tahitian Coral Oxygen Isotope and Sr/Ca Record

9:15 Adam Csank
Paleoclimate, and paleoecological reconstructions of the Pliocene Arctic: what tree-rings, mollusks and peat can tell us about the past to help us understand the future.

9:30 Break

9:45 Stephanie McAfee
Comparing satellite- and tree-ring based measures of net primary production (NPP): a pilot study

10:00 Todd Engelder
The role of extreme hydrologic events in long runout gravel progradation in alluvial basins.

10:15 Alexander Rohrmann
Wind erosion as the primary source of erosion since dry climate establishment in the Qaidam Basin, China and tectonic implications.

10:30 Amanda C. Reynolds
Nutrient Sourcing for Ten Plant Species in the Southwestern U.S.A using Strontium Isotopes: Effects of Growth Form, Rooting Depth, Bedrock Type, and Landscape Age

10:45 Break
Session VII: Geochronology & Geochemistry

Session Leaders:

11:00  Kelley Stair
A geochemical study on intermediate magmas from the Sierra de Valle Fertil: Insights into continental magmatic arc mechanics at depth

11:15  Kevin Jones
Radiocarbon chronology of Site QJ-280, Quebrada Jaguay, Peru.

11:30  Alyson Thibodeau
Following the Coronado Trail through Artifact-Based Lead Isotope Analysis

11:45  Lisa Molofsky
Prehistoric Trade of Tin in Southern Africa Revealed by Lead Isotopes

12:00  Lunch Break

1:15 PM  Bailey Dugan
New Production Rate Estimates for In Situ Cosmogenic 14C From Lake Bonneville, Utah and Northwest Scotland

1:30  James Girardi
Geochemical Evidence for the Development of and Removal of Gravitationally Unstable Residual Arc Rocks, Coast Mountains, B.C.

1:45  Carla M. Eichler
U-Pb ages of detrital zircons from sandstone of the Oligocene Chuska Formation, Northwestern New Mexico

2:00  Alex Pullen
Triassic continental subduction beneath the Qiangtang terrane in central Tibet and a case for Mediterranean-style closure of the Paleo-Tethys Ocean

2:15  S. Lynn Peyton
Low-Temperature Thermochronology of Borehole and Surface Samples From the Wind River and Beartooth Ranges, Wyoming and Montana

2:30  Break

2:45  George Davis, Field Trip Preparation

3:00  Keynote Speaker, Tekla A. Harms, Department of Geology, Amherst College, Amherst, MA
A MAP-SCALE SHEATH FOLD IN THE TOBACCO ROOT MOUNTAINS, MONTANA AND ITS ROLE IN THE EVOLUTION OF THE 1.78-1.72 Ga BIG SKY OROGENY
4:00  Special Recognitions
4:30  Student Awards
4:45  Slide Show
5:00  Thank you's
7:00  GeoDaze Party

End of Friday’s GeoDaze activities