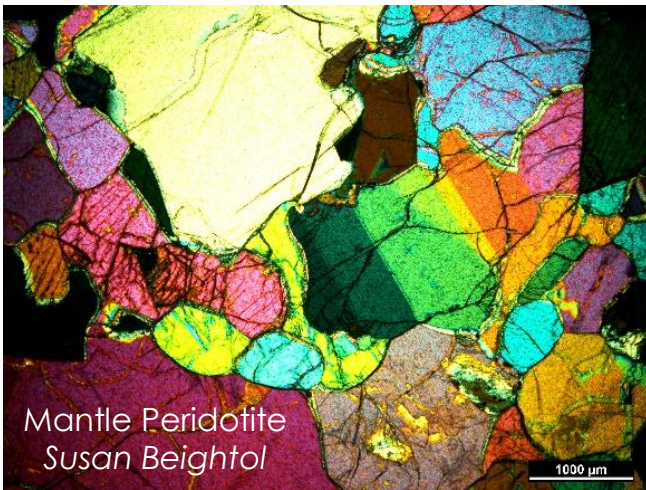


Inaugural Earth and Environmental Sciences Student Research Symposium

February 16th, 2018
Lake Huron Room
MSU Union



Mantle Peridotite
Susan Beightol

Agenda

- 9:30 – 10:00 Sign-In & Coffee
- 10:00 – 10:10 Welcoming Remarks
Joe Lee-Cullin, President EES GSO
David Hyndman, Chair
- 10:10 – 11:00 Oral Session I
- 11:00 – 11:10 Refreshment Break
- 11:10 – 12:00 Oral Session II
- 12:00 – 12:30 Lunch
- 12:30 – 1:00 Poster Session
- 1:00 – 2:30 Oral Session III
- 2:30 – 2:40 Refreshment Break
- 2:40 – 3:30 Oral Session IV



Oral Session I 10:10 – 11:00

Cultivation across Cultures: Exploring Urban Agriculture Motivations and Policies in South America and the US

Caitlin K. Kirby

Hydrologic flux alterations under bioenergy cropping systems

Autumn Parish

Grand Traverse Bay Watershed Groundwater Microbiology: Characterization of Native Microbial Communities and Analyses of How the Community Evolves in Standing Well Water

Lindsay Putman

Investigating different patterns of slab deformation in the lower mantle

Jiaxin Zhang

Refreshment Break 11:00 – 11:10

Oral Session II 11:10 – 12:00

Investigating the impacts of hydropower development, deforestation and climate change on the hydrology of rivers in the Brazilian Amazon

Brent P. Heerspink

Factors of Invasions within the Coastal Wetlands of the Great Lakes Basin ⚡

Bailey Hannah

Exploring Community Cultural Wealth Among Earth System Scientists

Patricia Jaimes

The Abuse of Agricultural Phosphorus: environmental impacts and economic risks ⚡

Gregory A. Putman

Genesis of Sulfide Mineralization within the Footwall Granite of the Maturi Cu-Ni-PGE Deposit of the South Kawishiwi Intrusion, Duluth Complex, NE Minnesota

Ronald A. Steiner

Lunch 12:00 – 12:30

Poster Session 12:30 – 1:00

Spatial measurement scales influence dissolved organic carbon characterization at the stream-groundwater interface across a watershed

Joseph Lee-Cullin

Application of a new method for maize yield forecasting in Tanzania

Lin Liu

Finding groundwater and septic tank seeps using distributed temperature sensing and drone images at Higgins Lake, Michigan.

Sabrina Curtis

Using Drone Imagery to Better Understand a Hydrologic Model

Julia Michienzi

Denitrifying Genes as functional markers to indicate differences among Denitrifying Bacterial Communities that caused by upwelling in Augusta Creek

Chenxi Li

Simulating the Effects of Widespread Adoption of Efficient Irrigation Technologies on Irrigation Water Use

Anthony Kendall

Oral Session III 1:00 – 2:30

Integrating satellite observations into process-based models to inform agricultural water management

Jillian M. Deines

Energy use in Kansas Irrigation for the past two decades ⚡

Benjamin McCarthy

Strength and Deformation of Solid Krypton and Xenon to 115 Gpa

Benjamin L. Brugman

Constraining the Crustal Structure of Eastern Siberia Using Peaceful Nuclear Explosion Seismograms ⚡

Kaitlynn Burkhard

Changes to Watershed Hydrology Resulting from Changing Snow Melt Patterns, Michigan, US

Chanse Ford

Investigating the Role of Hydrologic Residence Time in Nitrogen Transformations at the Sediment-Water Interface using Controlled Variable Head Experiments

Tyler B. Hampton

Examining the Spin Transition in Bridgmanite ⚡

Alison Farmer

Photosynq and Vegetation Indices: physical and statistical relationships

Michael Metiva

Blending Social Science and Physical Science: Using Media and Information to Better Understand Michigan Earthquakes ⚡

Eleanor Rappolee

Refreshment Break 2:30 – 2:40

Oral Session IV 2:40 – 3:30

Experimental insights into spin state and hyperfine parameters of Fe³⁺ in bridgmanite and silicate glass up to 91 Gpa

Mingda Lyu

Crops of the High Plains: Phenology through Space and Time ⚡

Jeremy Rapp

Crustal Structure of the Mangystau Region, Southwest Kazakhstan

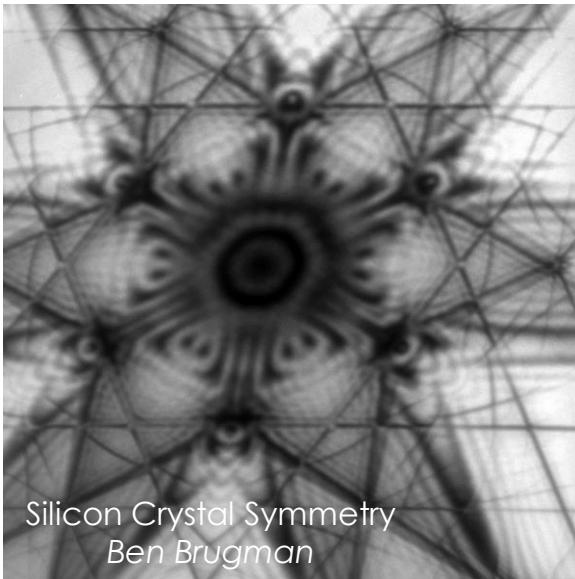
Luis B. Martinetti

Changes in the Hydrologic Regime of the Lower Mekong River Basin ⚡

Jacob Roush

Comparison of Biofuel Root Dynamics using a Hydrogeophysical Inversion

Alexandria Kuhl



The Symposium Committee would like to thank the following organizations for their generous sponsorship of this event

the Council of Graduate Students

**Department of Earth and Environmental
Sciences Alumni Group**

the Graduate School



Thompson's Harbor, MI
Alexandria Kuhl