

EPS 655 (16:460:655)

RESEARCH COLLOQUIUM – Fall 2023

Instructor: Dr. Ben Black (He/Him) Wright 213

Lecture Classroom: Wright Auditorium

Email: bblack@eps.rutgers.edu

Location: Colloquium will meet in the Wright auditorium on the following Wednesdays at 11:30 AM.

Course Description

The weekly EPS colloquium brings diverse speakers to campus to share cutting edge research with faculty and students. EPS 655 is required for pre-orals graduate students.

Course requirements

- In person attendance at 7 of 8 colloquia. Hybrid participation is by permission of the instructor.
- Response papers (~1 paragraph) submitted electronically prior to each colloquium on the schedule below
- Participation in at least 4 lunches (room 142) during the course of the semester with visiting speakers. You can come to every lunch if you like! Sign up here:
 - https://docs.google.com/spreadsheets/d/14pSO96UPZealC8-v1LJnXUx1FATr_DigJha-ezP5DzI/edit?usp=sharing

Colloquium schedule

Date	Colloquium Speaker	Speaker Institution	Title	Reading
Sept 6	Organizational meeting in Wright Auditorium at 11:30. <ul style="list-style-type: none">• What is Colloquium? Why is it required?• Schedule• Response papers• Sign up for lunches			
Sept 27	Loyc Vanderkluyzen	Drexel University	TBD	Sprain, C.J., Renne, P.R., Vanderkluyzen, L., Pande, K., Self, S. and Mittal, T., 2019. The eruptive tempo of Deccan volcanism in relation to the Cretaceous-Paleogene boundary. <i>Science</i> , 363(6429), pp.866-870.
October 4	12-1: Fiorella Prada	Rutgers University	TBD	Prada, F., Franzellitti, S., Caroselli, E., Cohen, I., Marini, M., Campanelli, A., Sana, L., Mancuso, A., Marchini, C., Puglisi, A. and Candela, M., 2023. Acclimatization of a coral-dinoflagellate mutualism at a CO2 vent. <i>Communications Biology</i> , 6(1), p.66.
October 11	Jacqueline Austermann	Columbia University	TBD	Barnett, R.L., Austermann, J., Dyer, B., Telfer, M.W., Barlow, N.L., Boulton, S.J., Carr, A.S. and Creel, R.C., 2023. Constraining the contribution of the Antarctic Ice Sheet to Last Interglacial sea level. <i>Science Advances</i> , 9(27), p.eadf0198.
October 18	GSA - no colloquium			

October 25	Rich Walker	University of Maryland	TBD	Marchi, S., Canup, R.M. and Walker, R.J., 2018. Heterogeneous delivery of silicate and metal to the Earth by large planetesimals. <i>Nature geoscience</i> , 11(1), pp.77-81.
November 1	12-1: James Eguchi	Rutgers University	TBD	Eguchi, J., Ding, S. and Black, B.A., 2023. Limited sulfur degassing and muted environmental impact of Ontong Java Plateau lavas. <i>Geology</i> .
November 8	Dept Awards lunch			
November 15	Harriet Lau	Brown University	Evolving Solid Earth Dynamics as a Trigger for the Mid Pleistocene Transition	Lau, H.C., Mitrovica, J.X., Davis, J.L., Tromp, J., Yang, H.Y. and Al-Attar, D., 2017. Tidal tomography constrains Earth's deep-mantle buoyancy. <i>Nature</i> , 551(7680), pp.321-326.
November 22	Thanksgiving - no colloquium			
November 29	Lee Kump	Penn State University	TBD	Kump, L.R., Pavlov, A. and Arthur, M.A., 2005. Massive release of hydrogen sulfide to the surface ocean and atmosphere during intervals of oceanic anoxia. <i>Geology</i> , 33(5), pp.397-400.
December 6	Emily Chin	UC San Diego	Rheological cycles of damage and healing: how cratons become strong	Lee, Cin-Ty A., Peter Luffi, and Emily J. Chin. "Building and destroying continental mantle." <i>Annual Review of Earth and Planetary Sciences</i> 39 (2011): 59-90. Or Chin, Emily J., Benjamin Chilson-Parks, Yuval Boneh, Greg Hirth, Alberto E. Saal, B. Carter Hearn, and Erik H. Hauri. "The peridotite deformation cycle in cratons and the deep impact of subduction." <i>Tectonophysics</i> 817 (2021): 229029.

Learning goals

By participating in this class, you will...

- Engage with cutting edge research in Earth and Planetary Science
- Learn presentation skills first-hand
- Gain experience with reading scientific papers
- Have opportunities to interact with leading international scholars

Grading breakdown

50% attendance, 50% response papers

Accommodations

Students with qualifying disability accommodation needs should speak with the instructor during the first two weeks of classes to arrange any necessary accommodations.

Technology

If you do not have access to the appropriate technology for financial reasons (e.g., personal computer), please email the Dean of Students (deanofstudents@echo.rutgers.edu) for assistance.

Student Absences

Health and safety are the priority. If you feel unwell or have reason to believe you may have been exposed to COVID, please do not attend class. Documentation of illness is not required. Please contact the instructors to notify them of the situation.

Instructor Absences

If the instructor is sick, the first option will be synchronous online instruction. If the instructor is too sick to teach online, alternative learning materials (e.g. recorded lectures or videos) will be made available.

Student Support and Mental Wellness

- Student Success Essentials: <https://success.rutgers.edu>
- Student Support Services: <https://www.rutgers.edu/academics/student-support>
- The Learning Centers: <https://rlc.rutgers.edu/>
- The Writing Centers (including Tutoring and Writing Coaching): <https://writingctr.rutgers.edu>
- Rutgers Libraries: <https://www.libraries.rutgers.edu/>
- Office of Veteran and Military Programs and Services: <https://veterans.rutgers.edu>
- Student Health Services: <http://health.rutgers.edu/>
- Counseling, Alcohol and Other Drug Assistance Program & Psychiatric Services (CAPS): <http://health.rutgers.edu/medical-counseling-services/counseling/>
- Office for Violence Prevention and Victim Assistance: www.vpva.rutgers.edu/