

Earth System Initiative Young Faculty Seminars:

Growth geometry of modern and ancient photosynthetic biofilms

Tanja Bosak

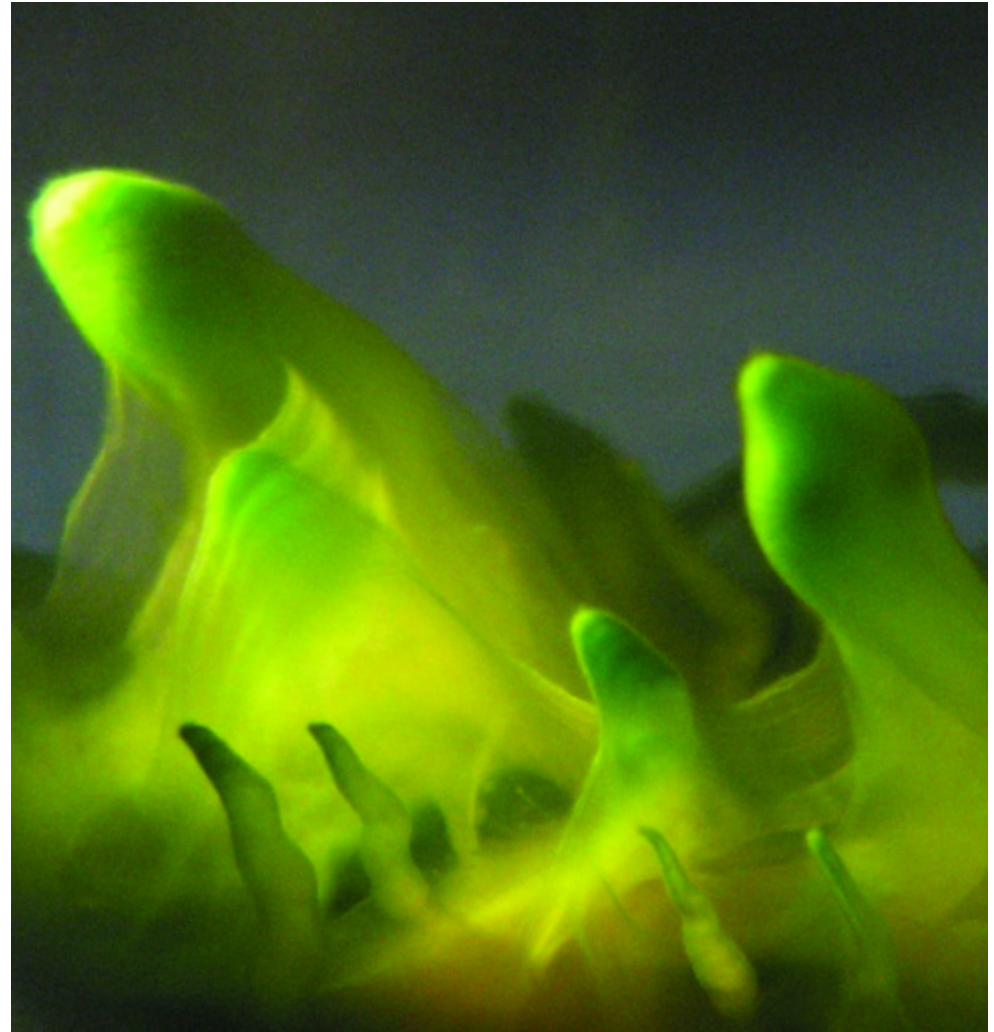
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Stromatolites are laminated and lithified sedimentary structures often interpreted as Earth's oldest macroscopic fossils. But do ancient stromatolites actually record evidence of biological processes in their morphology? Professor Bosak will present experimental and theoretical evidence linking the biological and physical processes of modern photosynthetic biofilm technology to the macroscopic geometry and textural signatures of contemporary conical stromatolites. This mechanistic understanding of the biophysical processes governing growth geometry in modern stromatolites allows us to identify evidence of photosynthetic processes preserved in rocks from early Earth.

4:00 pm Tuesday, March 9th

MIT Building 48-316

Reception to Follow



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