

Curiosity on Mars: Adventures in Rover Science

Peters Business room 194
Thursday, April 11th 4:30-5:30 PM

*parking permit available for off campus participants - call 559-278-3086 for parking code



The Mars Science Laboratory rover "Curiosity" has been exploring Gale Crater, Mars, since August 2012. Since that time, it has monitored radiation and weather, taken tens of thousands of images, made hundreds of elemental analyses, and characterized two solid samples. Dawn will provide an over view of the mission, including what it is like to use a robotic chemistry lab on another planet to ask scientific questions. She will also present the newest results on a grey rock from a red planet.



Dawn Sumner's driving research questions center around understanding microbial evolution, particularly developing ways to constrain the early evolution of life on earth. She and her students study both modern communities and ancient microbialites to characterize microbe-environment interactions and the processes that govern community morphology. They also use stratigraphy and sedimentology to constrain depositional environments and water chemistry on early Earth and Mars. KeckCAVES 3D visualization and software development are integrated into many of her group's Astrobiology projects.