
Physics Colloquium

“What’s the Space Science and Engineering Laboratory up to: Past, Present, and (the ideal) Future”

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Friday, March 21, 2014
4:10 – 5:00 pm, 108 EPS

Abstract: The Space Science and Engineering Laboratory was founded within the Physics Department almost 14 years ago to develop a spaceflight hardware capability in Montana. In the interim, the SSEL has achieved that vision while involving hundreds of undergraduate and graduate students in the hands-on development of spaceflight hardware. The program is broadly interdisciplinary engaging students from academic departments in both the colleges of Letters and Sciences (CLS) and Engineering (CoE), as well as other academic departments across the university. Both careers and satellites have been launched as Montana State University has joined the ranks of space-faring universities. The speaker will review the both the human and the technological accomplishments of the SSEL from the beginning to the present. Program graduates, at all levels; bachelors, masters and PhD have taken employment across the space industry, and continue to be sought as valued employees by commercial, government, and academic employers. A spin-out aerospace company, 406 Aerospace LLC, has been founded here in Bozeman as a direct result of SSEL activities. Missions and payloads carrying out both scientific and technological objectives have been developed and flown on balloons, sounding rockets, on the International Space Station, and as free-flyers in space. Three satellites built in the SSEL currently orbit Earth. Three additional free flyer satellites are scheduled to launch in 2014, as are eight additional satellites carrying SSEL science payloads. Beyond 2014 the future could be very bright as more students launch aerospace careers, increasingly sophisticated spaceflight payloads are designed and flown, and a local aerospace industry flourishes and grows. However, as is often the case, the path forward is not clear; federal funding for research is not even keeping pace with inflation and local investments have not been made. What value do the State of Montana and Montana State University place on these kinds of activities? Will future resources be forthcoming, or will the future fall short of its potential?

Host: Jiong Qiu
Refreshments 3:45 p.m.
EPS 2nd Floor Atrium