

Seminar: Why Microgravity? A Primer on Platforms and Experiment Design

 Space lecture: "Why Microgravity? A Primer on Platforms and Experiment Design"

 Who: Stefan Krämer, program manager at SSC

 When: Wednesday 8/10 at 15:15

 Where: [V2, Teknikringen 76](#)

Also on [Zoom](#) !

Stefan Krämer is a Program Manager at the Swedish Space Corporation (SSC), where he has been active since 2014. He currently leads SSC's Microgravity Services and the SubOrbital Express program, managing missions that enable advanced research in weightlessness. Stefan also oversees the development of microgravity experiment and flight systems for sounding rocket missions, drop towers, and related platforms. Previously, he was responsible for the REXUS/BEXUS student rocket and balloon program. Over the years, he has led eight microgravity missions and coordinated several stratospheric balloon launches, contributing significantly to SSC's suborbital and educational spaceflight initiatives.

Why Microgravity? A Primer on Platforms and Experiment Design

Microgravity research enables scientists to observe phenomena that are otherwise obscured by Earth's gravity—revealing new insights in physics, biology, and materials science. In this short lecture, we'll explore why microgravity matters, what platforms are available to access it, and how to approach experiment design in this unique environment.

From drop towers to orbital missions, each platform offers distinct opportunities and constraints. While sounding rockets may be used as illustrative example for capabilities enabled in Sweden, the goal is to broaden understanding of microgravity capabilities and introduce key design principles such as duration, acceleration environment, and payload integration.

This talk is intended as a gateway for students and researchers curious about the potential of microgravity experimentation.



