

2025 Workshop: Snakes on a Spaceship

Long title

Snakes on a Spaceship: The Menagerie

CEDAR-GEM

Conveners

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Description

The pursuit of system science requires integrating measurements from multiple platforms into a coherent system for analysis. The variety of instrument types and data formats makes this challenging. Typically these challenges are solved separately by different research teams, leading to duplicated efforts. The reproducibility of scientific results are also affected, since most journal articles do not include complete analysis descriptions. The study of the magnetosphere and the ionosphere as a system would be enhanced if solutions to these problems were made broadly available to the community.

This year, 'Snakes on a Spaceship' will focus on Python packages developed by and for the CEDAR and GEM communities and a tutorial on unit tests.

Agenda

1. Introduction
2. Tutorial - Unit Tests
3. GCMprocpy
4. RBinvariantslib
5. kaipy
6. pyDARNio updates
7. pyAuroraX and more

8. Discussion

Join us in person or virtually

Topic: Snakes on a Spaceship 2025

Time: Jun 23, 2025 04:00 PM Central Time (US and Canada)

Join from PC, Mac, Linux, iOS or Android:

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Meeting ID: 821 0485 4913

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Justification

This workshop addresses the CEDAR strategic thrust #6: manage, mine, and manipulate geoscience data and models. This will be the 11th annual CEDAR Snakes on a Spaceship workshop, and provides a meeting place for researchers of different career levels and programming experience to meet, learn from each other, and build collaborations around the data methods and analysis tools they develop to tackle scientific problems. The tutorial (hosted in the workshop session) addresses the topic brought up most in last year's discussion portion of the session, where the importance of unit tests (and barriers for their development) were discussed at length.

Related to CEDAR Science Thrusts:

Manage, mine, and manipulate geoscience/geospace data and models

Workshop format

Short Presentations

Round Table Discussion

Other

Keywords

Reproducibility, data access, data analysis, software

Focus Group and Group Leader

Modeling Methods and Validation - Alexa Halford (discussed joint session), Liemohn, Lutz Rastaetter, and Josh Rigler

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