Webnucleo Astro-Hackathon

https://github.com/Cmich-Nucleosynthesis-Workshop/webnucleo-astrohackathon-2020

Join a team now to participate in the first Clemson-CMU Astrophysics Hackathon spend the weekend modeling nuclear reactions in exploding and simmering stars, and earn scientific bragging rights!

When: Friday, April 17th- Monday, April 20th
How: Online hackathon using the Webnucleo reaction network code (see *GitHub* section).
Questions:contact @ CMU, George Perdikakis (perdi1g@cmich.edu) or Alfredo Estrade (estra1a@cmich.edu)

Tentative Schedule
(things might change slightly according to needs)

General session #1: Hackathon Opening. **Friday at 1:15 pm**. Welcome and a brief introduction to Webnucleo and the Hackathon's logistics. We'll provide a meeting link through GitHub.

Teamwork Session #1:Work on exercises to learn the use of Webnucleo's tools to run reaction network calculations for different astrophysical scenarios, and how to analyze its output. Don't forget to look at the examples already available on the web!

General session #2:Scientific Challenge. **Friday at 3:30 pm.** Discuss lessons learned from the technical session. Presentation of scientific challenges for the hackathon.

Teamwork session #2:Plan the project you will attack during the hackathon.

General session #3:Discussion of our plans. **Friday at 5:00 pm.** Teams present their astrophysics projects and get feedback from mentors and other groups.

Teamwork session #3:The teams are in control of their own schedule over the weekend. Submit your final code and results by **8 am Monday**.

General session #4:Grand Finale! **Monday at 1 pm.** Teams present final results. Award sessions!

Pre-hackathon: **Thursday at 3 pm.** Help session if you need assistance installing *Docker* and get *Webnucleo* on your computer. Link: https://cmich.webex.com/meet/estra1a

Prizes!

“I survived the quarantine hacking nuclear astrophysics codes!” t-shirts to all participants.

Special awards for:

- Best visual effects (a.k.a. data visualization challenge).
- The most original solution to a technical/science question.
- Best science outcome.

Astro-hacking Teams

Teams can have from 2 to 4 participants. Create your own. We encourage teams around common science interests. Github’s discussion board is a good place to get started recruiting members for your team or joining others:
https://github.com/orgs/Cmich-Nucleosynthesis-Workshop/teams/students/discussions/7

How to register your team: email George Perdikakis (perdi1g@cmich.edu) by Friday at 10 am with the following information: names and emails of participants and GitHub usernames if available, team’s name, and scientific interest(s) (can be broadly defined).

Contact the organizers if you need help putting a team together; we can also help you to find one suitable for your level of expertise with reaction networks.

We’ll use GitHub as a central repository and for the submission of your project’s results. Teams are free to choose other tools for communication or collaborative work (e.g. Slack, Discord, etc), but GitHub should be where your official code lives.

Mentorship

The general meeting session will be continuously open on Friday, with *senior participants* available to answer any kind of question. We’ll also have a couple of *help sessions during* the weekend. Otherwise make a post in the *Help Me* discussion board of Github, which will be regularly monitored.

GitHub

We have a Github Team for all the participants (“students” team) and a general code repository that you can access at
https://github.com/Cmich-Nucleosynthesis-Workshop/webnucleo-astrohackathon-2020

This is the main source of information: instructions on how to run Webnucleo in Docker, detailed instructions for exercises, competitive science challenges for the hackathon, discussion boards, etc. Use it often, particularly the wiki

All astrohacking teams will be created under the “students” team based on the discussion there (see https://github.com/orgs/Cmich-Nucleosynthesis-Workshop/teams/students/discussions/7and subscribe to get notified of new discussions), or by contacting the organizers.

Each Team will have its own GitHub team space with a discussion board and a team-owned repository where you can share your work (see example here: https://github.com/Cmich-Nucleosynthesis-Workshop/sample-team-one). This repository will also be used as the submission page for your final project.

Code of conduct

We adopt the JINA code of conduct for workshops and conferences: https://www.jinaweb.org/jina-cee-conference-code-conduct

JINA-CEE Code of Conduct

JINA-CEE workshops and conferences are committed to providing a safe, harassment and discrimination-free environment for everyone.

Harassment includes offensive verbal comments or jokes related to nationality, gender, sexual orientation, disability, physical appearance, body size, race, religion, sexual images in public spaces, deliberate intimidation, stalking, following, harassing photography or recording, sustained disruption of talks or other events, inappropriate physical contact, and unwelcome sexual attention. All communication should be appropriate for a professional audience including people of many different backgrounds. Be kind to others. Do not insult or put down other attendees. Behave professionally. Participants asked to stop any harassing behavior are expected to comply immediately. JINA-CEE will not allow retaliation against any individual who makes a report of known or suspected harassment. Attendees violating these rules may be asked to leave the event at the sole discretion of the conference organizers.