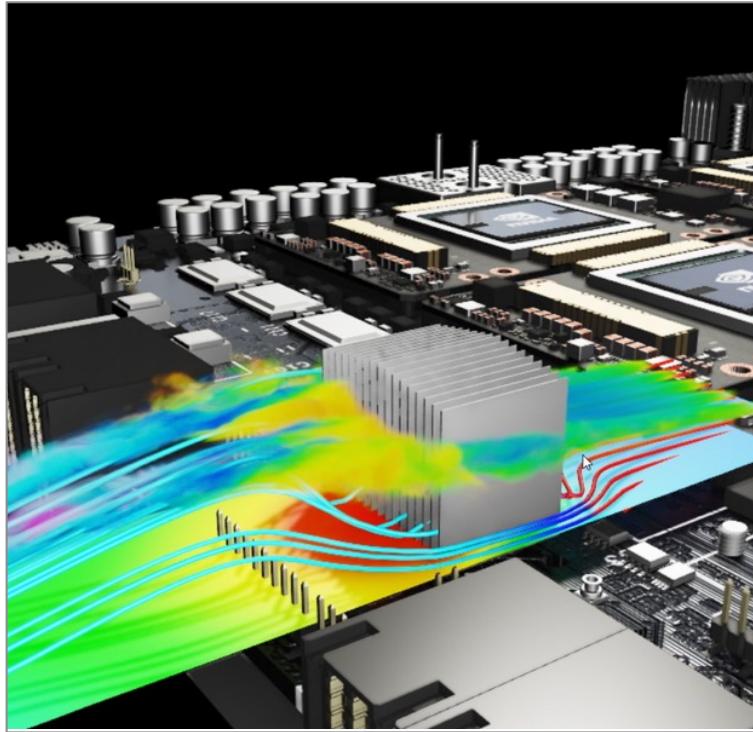
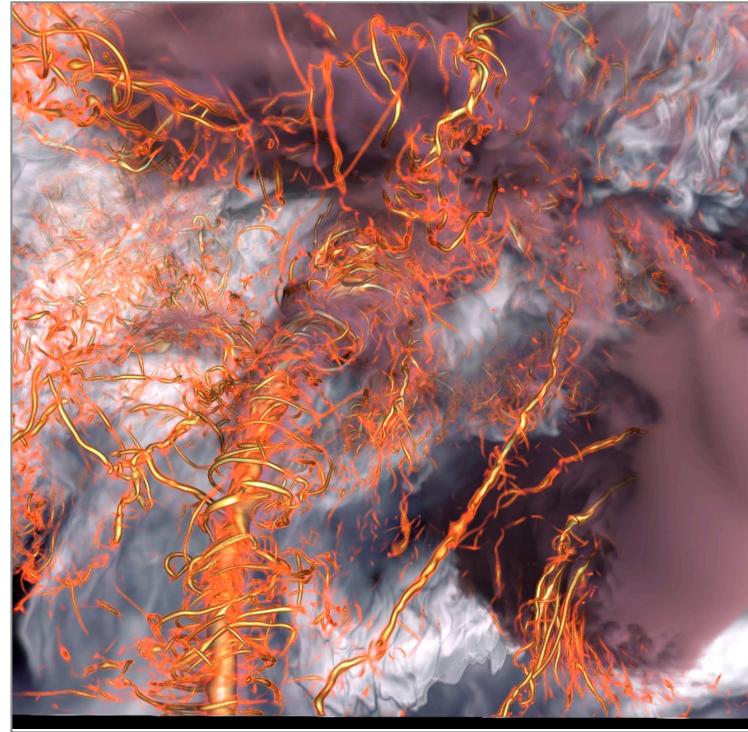


AI & Simulation
Modulus



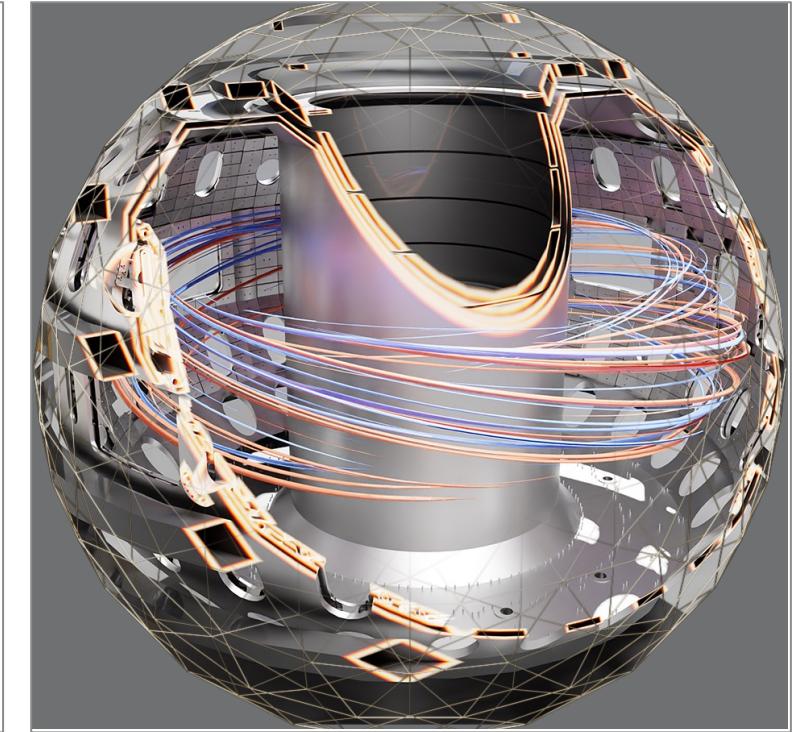
https://www.youtube.com/watch?v=Oq2MpI5pF1w&ab_channel=NVIDIADeveloper

Visualization
Paraview / Index / Omniverse



https://www.youtube.com/watch?v=SonfENaSesw&ab_channel=NVIDIADeveloper

Digital Twin
Omniverse

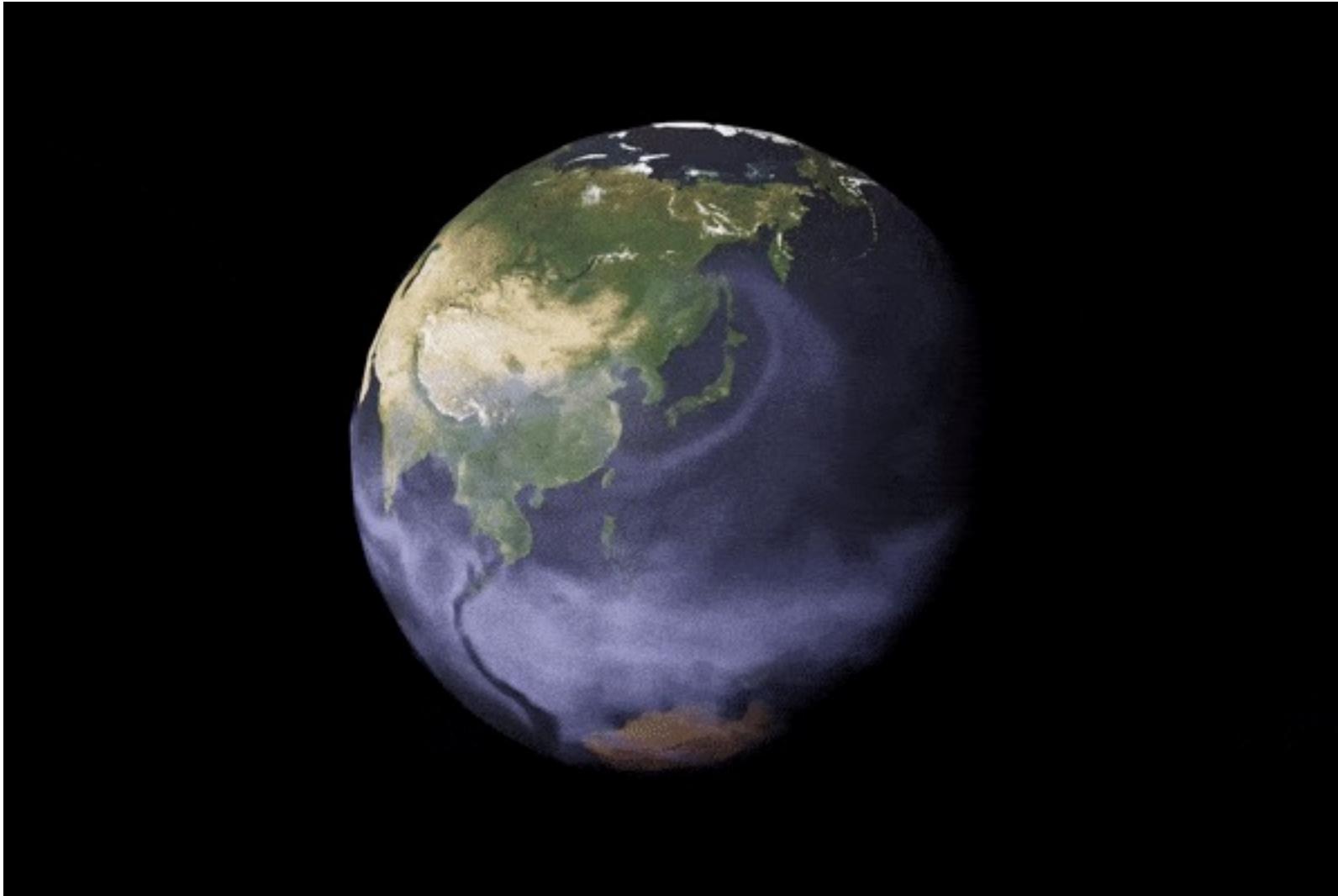


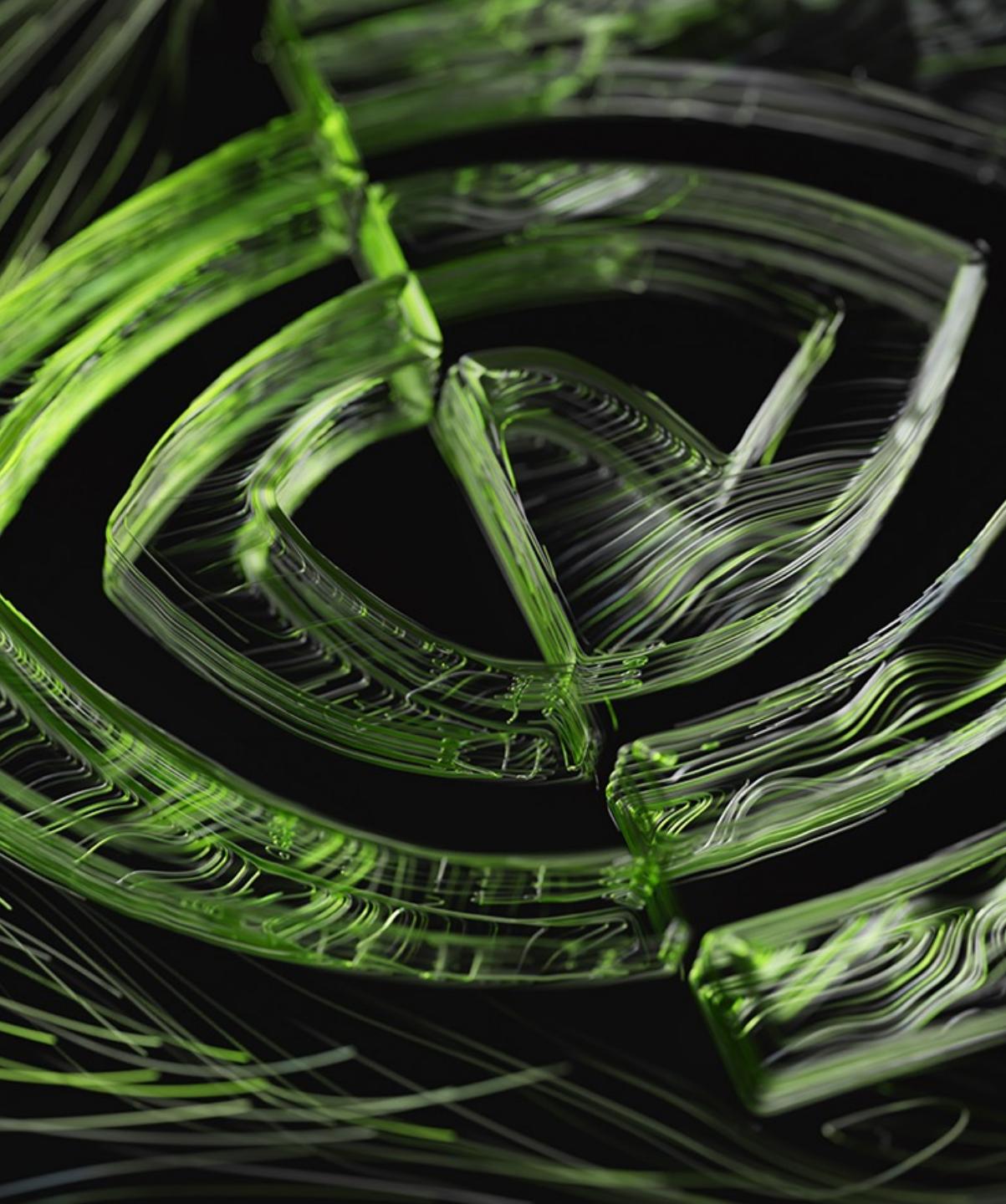
https://www.youtube.com/watch?v=tJqR1TSBD0k&ab_channel=NVIDIAOmniverse

End to End AI for Science

End to End AI for Science Bootcamp

<https://github.com/openhackathons-org/End-to-End-AI-for-Science>





Agenda

- 08:50 ~ 09:00 : ☺☺☺ Welcome & Group Photo ☺☺☺
- 09:00 ~ 09:50 : Intro to PINN and NVIDIA Modulus – **Dr. CK Lee**
- 10:00 ~ 10:25 : Advanced PINN Research sharing – **Dr. Kan**
- 10:30 ~ 12:00 : [Lab1] PINN for Science application – **Dr. CK Lee**
- 12:00 ~ 13:00 : ☺☺☺ Lunch Break ☺☺☺
- 13:00 ~ 14:00 : [Lab2] Data-driven AI for Science – **Jay Chen**
- 14:10 ~ 14:55 : Introduction to NVIDIA Omniverse – **KT Yeh**
- 15:00 ~ 16:00 : [Lab3] Visualization Using Omniverse – **KT Yeh**

OPENACC – CELEBRATING 11 YEARS

Building Community.



Ecosystem
Development

Training/Education

OpenACC Specification



H OPEN
HACKATHONS
OpenACC

OPEN HACKATHONS IN NUMBERS

Founded in 2014 under OpenACC Org Umbrella

500+

Applications accelerated

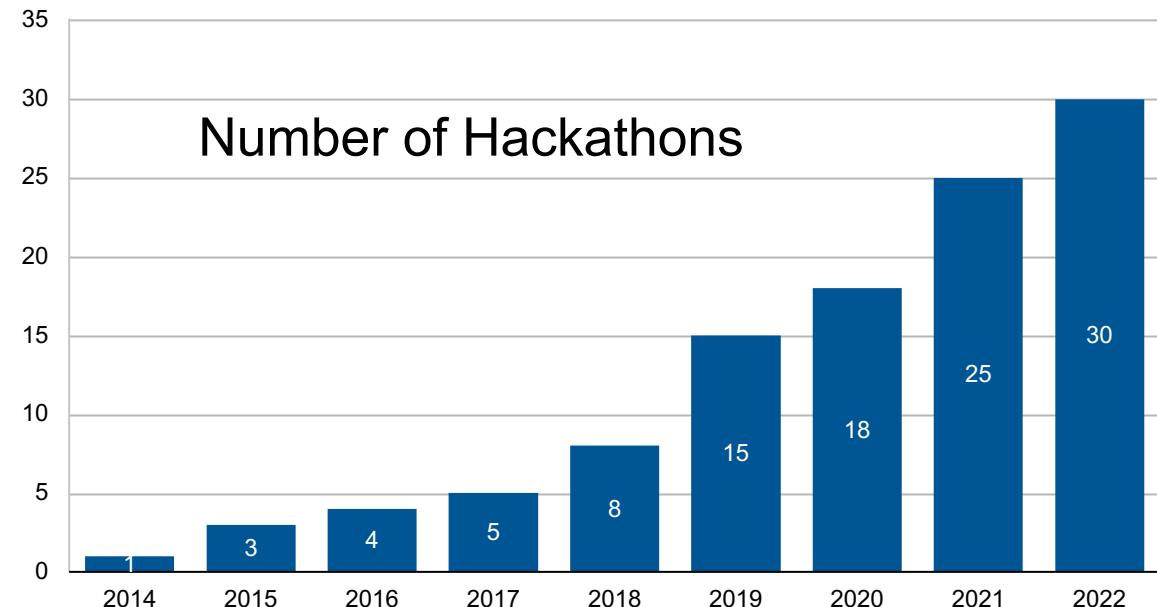
600+

Mentors contributed

Community

Compute Resources Provided

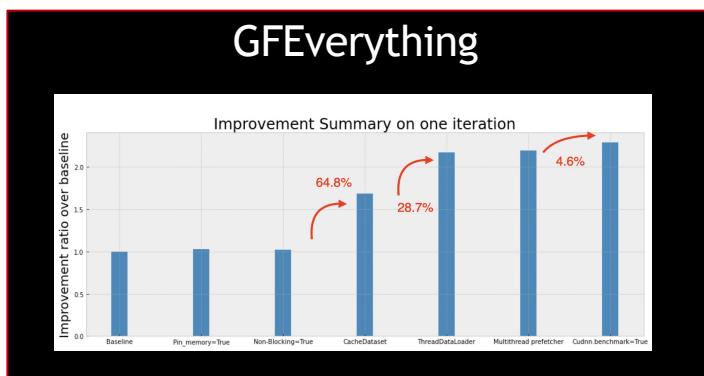
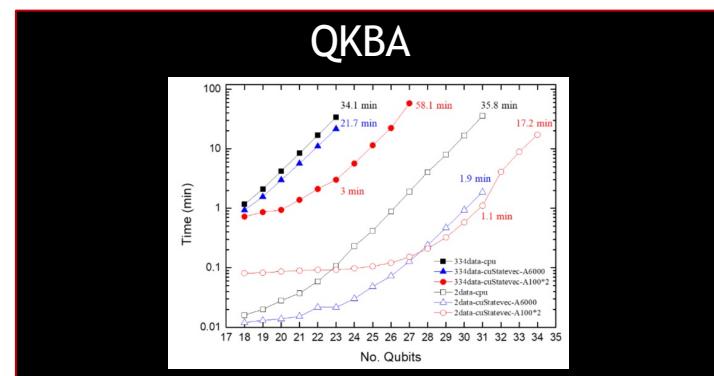
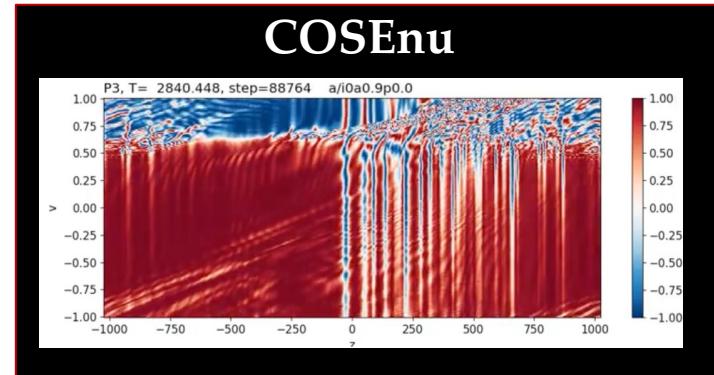
Founding members



www.openhackathons.org



2022 NCHC OpenACC Hackathon



07/28-29 N-WAY GPU Bootcamp

<https://www.openacc.org/events/nchc-n-ways-gpu-programming-bootcamp>



The NCHC, in collaboration with OpenACC organization and NVIDIA, is hosting the NCHC N-Ways bootcamp for one and a half days on July 27 and July 28, 2023.

During this bootcamp, participants will learn about multiple GPU programming models and can choose the one that best fits their needs to run their scientific codes on GPUs. This bootcamp will cover an introduction to GPU programming using OpenACC, OpenMP, stdpar, and CUDA C, and provides hands-on opportunities to learn how to analyze GPU-enabled applications using NVIDIA® Nsight™ Systems. This bootcamp is a hands-on learning experience where you will be guided through step-by-step instructions with teaching assistants on hand to help throughout.

APPLY NOW

Event Format

This bootcamp will be hosted with Day 1 (July 27) online and Day 2 (July 28) in-person and will be in the Taipei time zone. All communication will be done through Microsoft Teams and email.

Important Event Dates

NCHC N-Ways Bootcamp Application Deadline	July 04, 2023
NCHC N-Ways Bootcamp Day 1	July 27, 2023
NCHC N-Ways Bootcamp Day 2	July 28, 2023

Questions?

11/27-12/08 OpenACC Hackathon

<https://www.openhackathons.org/s/siteevent/a0C5e000005VZLiEAO/se000160>



Open Hackathons provide exciting opportunities for scientists to accelerate their AI or HPC research under the guidance of expert mentors from national laboratories, universities and industry leaders in a collaborative environment. Representing distinguished scholars and preeminent institutions around the world, these teams of mentors and attendees work together to realize performance gains and speedups using a variety of programming models, libraries and tools.

The goal of the Open Hackathon is for computational scientists to port, accelerate and optimize their scientific applications to modern computer architectures, including CPUs, GPUs and other computing technologies. Participating teams should leave the event either with their applications accelerated and/or optimized on the latest supercomputing hardware or a clear roadmap of the next steps needed to leverage these resources.

This Hackathon is open to everyone looking to take their projects to the next level; however, priority acceptance will be given to TWS/NCHC affiliated scientists and their collaborators.

If you would like to be notified when the call for applications is open, please click the button below.

NOTIFY ME

Important Event Dates

NCHC Open Hackathon 2023 Application Deadline	October 04, 2023
NCHC Open Hackathon 2023 Team/Mentor Meeting	November 27, 2023
NCHC Open Hackathon 2023 Day 1	November 27, 2023
NCHC Open Hackathon 2023 Day 2	December 06, 2023

2023 NCHC-NVIDIA Events

 2023-04-06 11:40:00

服務資訊

一、本專案旨在培育高效能計算(High Performance Computing, HPC)模擬相關領域人才，期望結合NCHC TWCC GPU計算資源 & NVIDIA HPC related Toolkits/SDKs，支援及獎勵大學專題生、碩士班&博士班研究生進行與HPC模擬相關應用分析之研究計畫，擴大研發量能及人才培育服務效益，提升台灣在HPC 模擬相關領域的研究水平和國際競爭力。

二、HPC模擬研究計畫主題:

- NVIDIA Modulus (AI Empowered Simulation) Package
- Fine- or Prompt-Tuning Large Language Models (LLMs)
- Quantum Computing
- Others

三、申請人資格:

- 國內大專院校大學專題生(大三、大四)、碩士班&博士班研究生
- 曾上過NVIDIA Modulus Bootcamp課程、LLMs、Quantum Computing Workshop or 具備使用經驗為佳
- 具備Python、Matlab程式撰寫能力

四、申請方式: 公告日起至2023年7月31日止，請將「高效能計算(HPC)模擬研究計畫」申請書(詳見附件檔案)email至hckan@narlabs.org.tw(國網中心甘恆全博士)。

五、審查方式: 採隨到隨審制，根據研究計畫內容的創新性、難易度及可行性進行審查，總計提供10個研究計畫專案名額，滿額後即停止受理申請。收到申請文件後，14日內回覆審查結果。

六、資源補助: 每個核可研究計畫案將獲得NCHC GPU VM (One A100 GPU) with NVIDIA HPC related Toolkits/SDKs 三個月的計算資源補助及NVIDIA HPC團隊技術支援(核可研究計畫案執行期間，以Office Hours方式支援)。

七、成果獎勵: 每個核可計畫案執行結束後，需繳交計畫結案報告(格式不限，以20頁為限)。依據計畫結案報告內容，選出2件成果最傑出的計畫案，每位得獎者可獲得 NVIDIA 提供的獎金，其指導教授亦可獲得NCHC GPU VM免費使用額度(\$10,000等值國科會計畫額度)。



高效能計算(HPC)模擬研究計畫-申請書.docx

https://iservice.nchc.org.tw/nchc_service/nchc_service_news_content.php?contentId=928107&type=all_content&newsId=49332

NCHC-NVIDIA 高效能計算(HPC)模擬研究計畫

3-Minute Feedback Survey

<https://forms.gle/x7Sa4ZC9pxxohkhG8>



20230525 Feedback Survey - AI for Science Bootcamp

登入 Google 即可儲存進度。 [瞭解詳情](#)

* 表示必填問題

電子郵件 *

你的電子郵件

活動整體印象評分 *

1

2

3

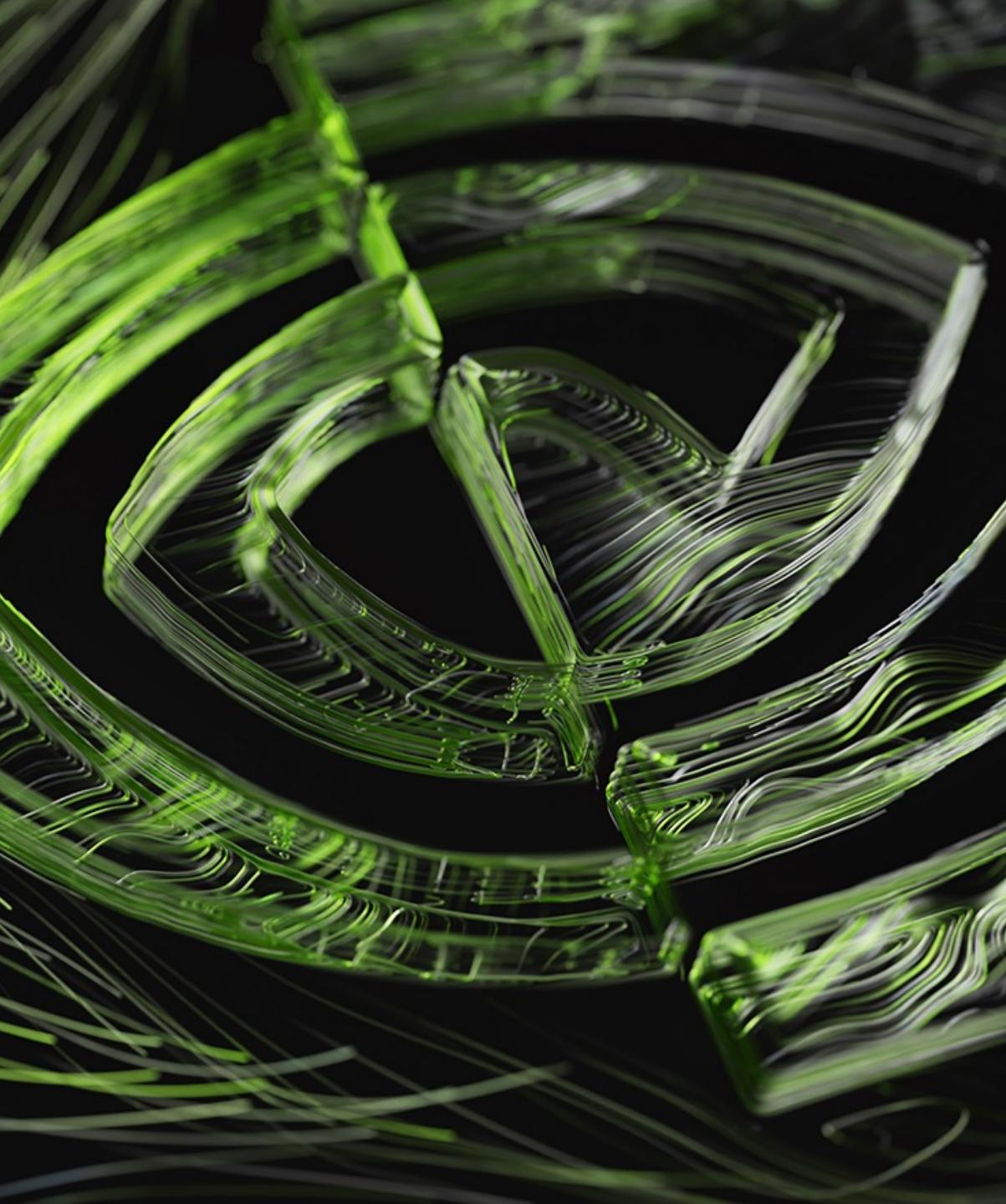
4

5

很糟

很讚

今日Labs哪些對您有幫助？（複選） *



Agenda

- 08:50 ~ 09:00 : ☺☺☺ Welcome & Group Photo ☺☺☺
- 09:00 ~ 09:50 : Intro to PINN and NVIDIA Modulus – **Dr. CK Lee**
- 10:00 ~ 10:25 : Advanced PINN Research sharing – **Dr. Kan**
- 10:30 ~ 12:00 : [Lab1] PINN for Science application – **Dr. CK Lee**
- 12:00 ~ 13:00 : ☺☺☺ Lunch Break ☺☺☺
- 13:00 ~ 14:00 : [Lab2] Data-driven AI for Science – **Jay Chen**
- 14:10 ~ 14:55 : Introduction to NVIDIA Omniverse – **KT Yeh**
- 15:00 ~ 16:00 : [Lab3] Visualization Using Omniverse – **KT Yeh**