



ePIC Software and NERSC Computing

EIC@LBL Meeting
6 September 2022

ePIC Software Tutorials

- Long EPIC General Meeting
 - Thursday Aug 25, 2022, 6:30 PM → 8:30 PM America/Los_Angeles
- Announcement of software tutorials
<https://indico.bnl.gov/category/443/>
- Tutorials are coupled to allow all time zones
- Hands-on style allows to actually have a running software stack and simulation packages by the end of the session
- Availability of the developers during the tutorials allows all the possible questions to be answered
- I highly recommend attending these

September 2022

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|---|--------|--|
|  | Sep 27 | Tutorial: Reconstruction algorithms in JANA2: from geant4 to reconstructed quantities |
|  | Sep 26 | Tutorial: Reconstruction algorithms in JANA2: from geant4 to reconstructed quantities |
|  | Sep 16 | Tutorial: Simulation of single particles or physics events using geant4 and ddsim |
|  | Sep 15 | Tutorial: Simulation of single particles or physics events using geant4 and ddsim |
|  | Sep 09 | Tutorial: Geometry development using DD4hep: how to modify or add detector description |
|  | Sep 08 | Tutorial: Geometry development using DD4hep: how to modify or add detector description |
|  | Sep 02 | Tutorial: Setting up your environment for collaborative EPIC development |
|  | Sep 01 | Tutorial: Setting up your environment for collaborative EPIC development |

Energy Research Computing Allocations Process - ERCAP

- Yearly allocation of resources at NERSC's HPC
 - Cori and Perlmutter both available currently
 - These resources come for free to the group
 - Anybody in this group can acquire NERSC account and use these resources for the EIC related work [project name "m3763"]
 - Project currently has 14 users with

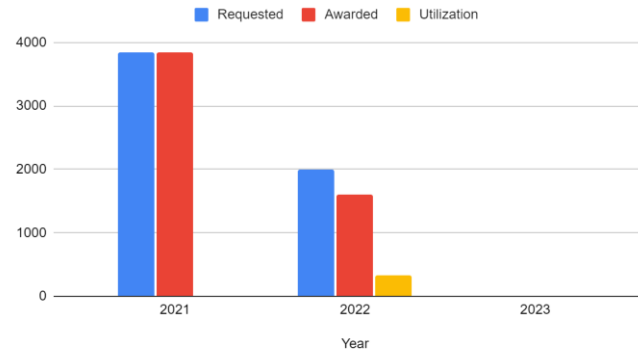
User	Username	Account	Node Hours Charged	Machine Hours	Node Hours
 Cruz Torres, R...	reynier	m3763	159	159	454
 Fan, Wenqing	wenqing	m3763	78	78	224
 Yeats, Emma	eyeats	m3763	70	70	200
 Liang-Gilman, ...	blianggi	m3763	20	20	57

- Deadline for 2023 requests is October 3, 2022
 - I have started updating the request and will need your input in a week or so to finalize

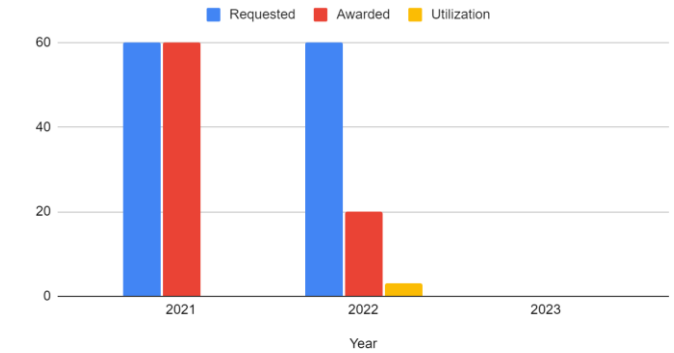
ERCAP Allocation History

- EIC Project at NERSC started in 2021
- ERCAP allocations are based on
 - Justification of need
 - Past utilization
- GPU allocations for 2022 were given by default, because NERSC was testing – this may change in 2023

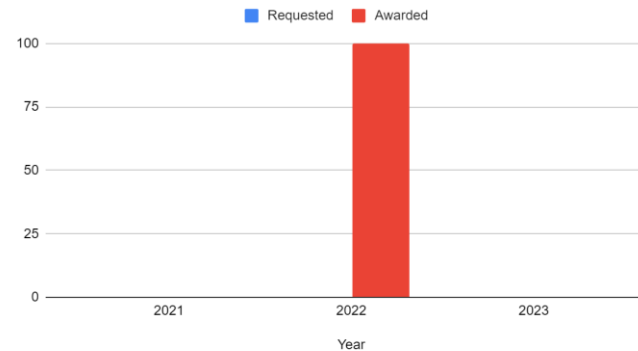
CPU Allocation [node-hours]



CFS Allocation [TBytes]



GPU Allocation [node-hours]



HPSS Allocation [TBytes]

