

IT at the IIHE

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Support Activities

New Hardware

Video Conference system in Sacton room

- Logitech Rally system
- Three rooms are now equipped
 - Z-room
 - Neutrino-room
 - Jean Sacton room
- Place all cables back how you found them!



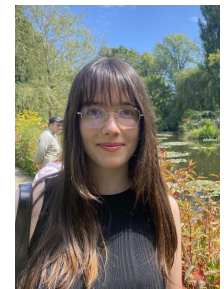
New printer installed at level 0

- Leased printer
- Ricoh



Software

- Continual fine tuning of our spare laptops
 - To meet user requests
 - Updates
- Migration to EL9 (Centos 7 deprecated since June)
 - Groundwork has been done
 - All websites need to be upgraded
- Production planner developed (CMS tracker production)
 - UI look & feel: Golnaz
 - Coding: Adriano, Réka & Romain



Réka
Desmecht



Production Planner

Production Planner

My Board

- My Profile
- My Availability
- My Assignment
- Users
- Tasks
- Weekly Planning


LOG OUT

WEEK 43 October 21-25, 2024









Production Planner

Olivier

 Production Planner

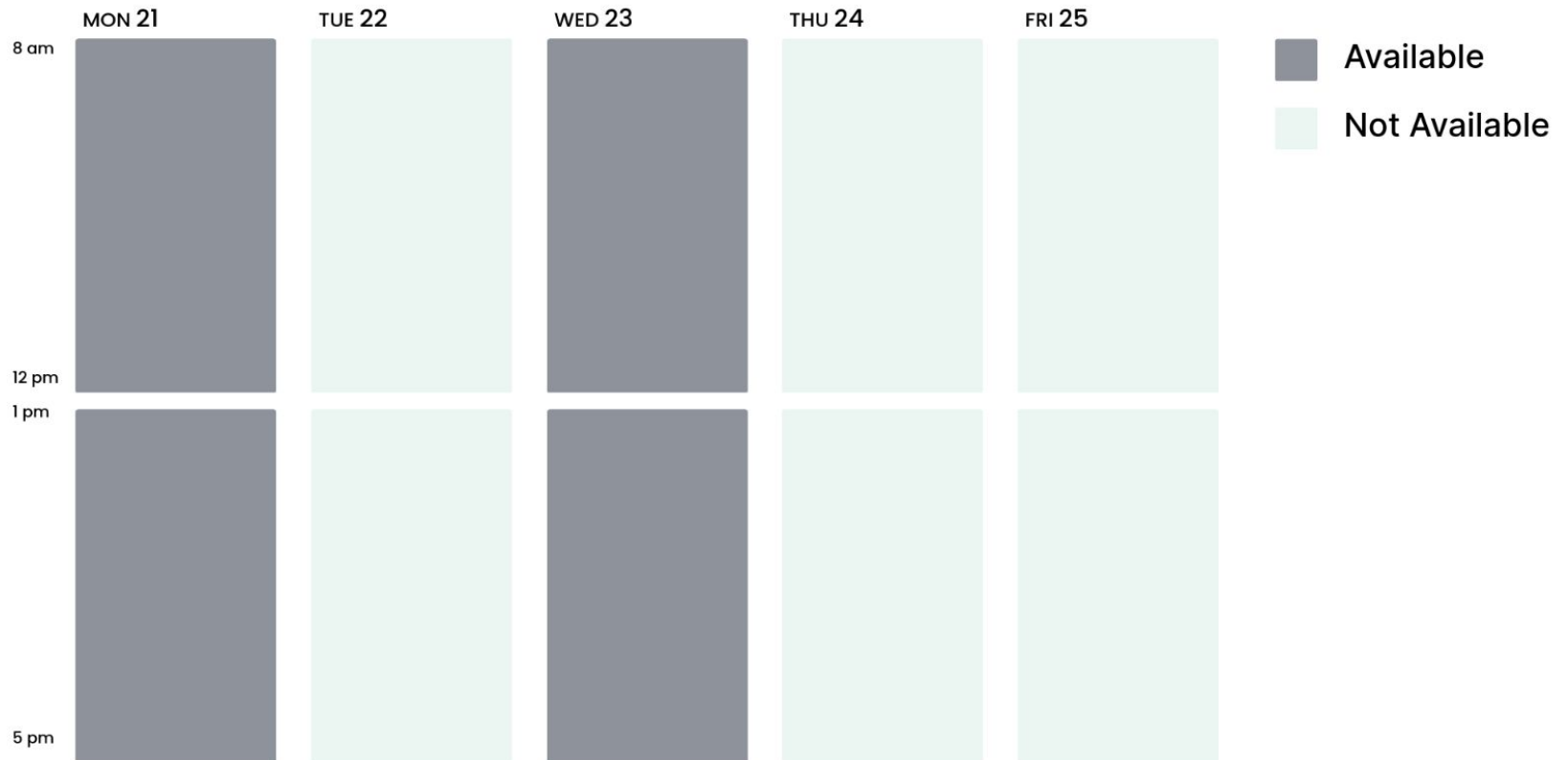
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WEEK 43   October 21-25, 2024

[Olivier]



A history of IIHE through pictures

Photoview website

Link on intranet home my.iihe.ac.be

Photos are Private
Can make sharing links for albums

- Please send us your pictures from conferences/workshops that have a 'documentary value'.



1960ies



1970ies



1972



1975



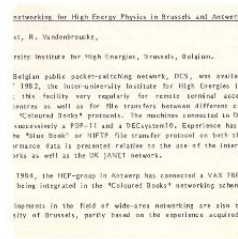
1980



1981



1983



1985



1987



1988



1989



1990



1991



1994

European 2

Symposium on High Energy Physics Research in Europe



1995



1997



2011



2014



2015



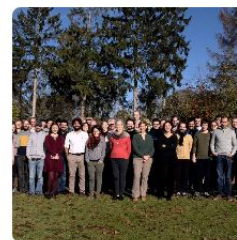
2016



2017



2018



2019

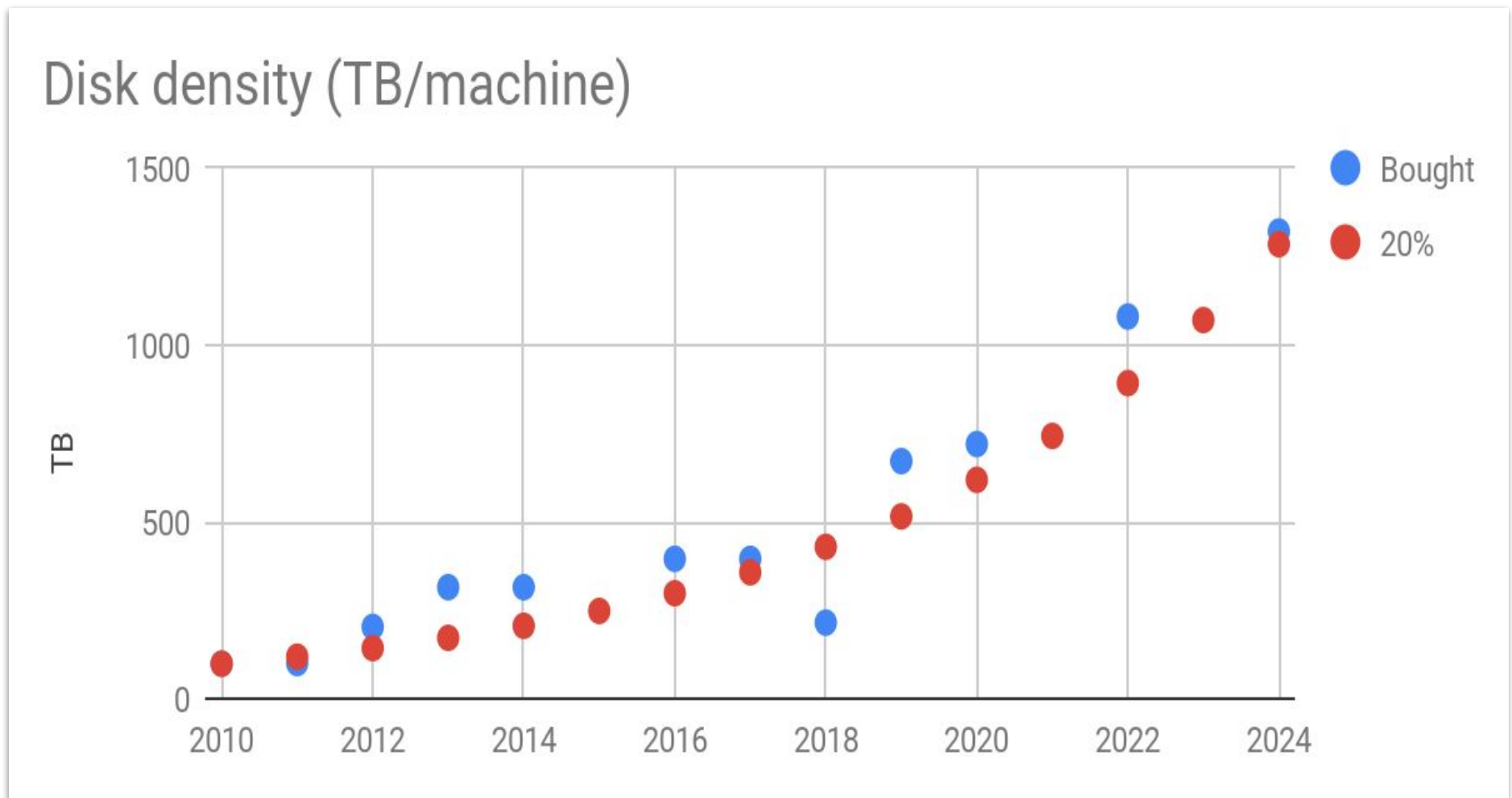


2022

T2B Activities

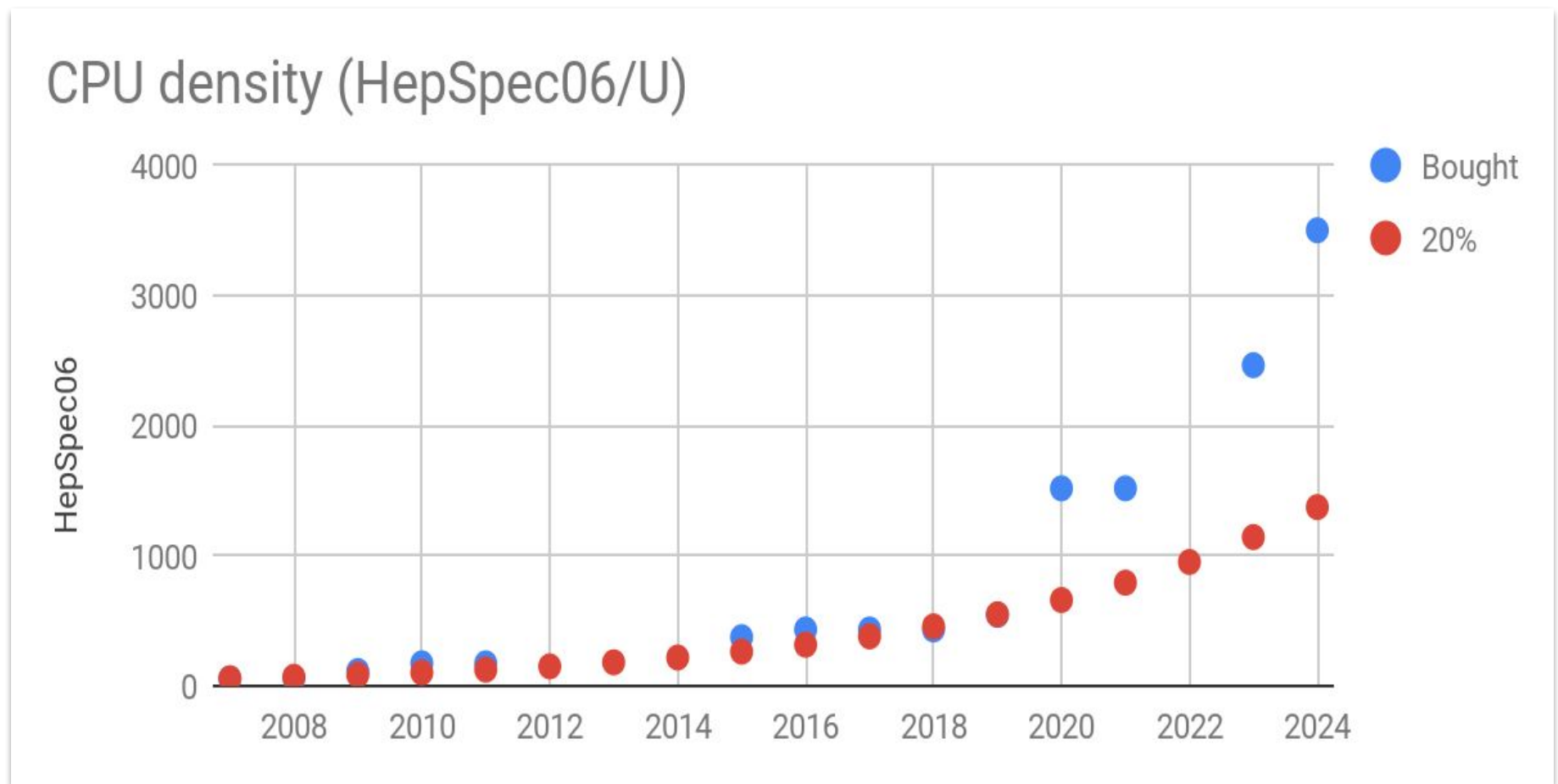
New Challenges in Data Centers

- New acquisitions: denser hardware
 - DISK: 60 x 22TB disks per server



New Challenges in Data Centers

- New acquisitions: denser hardware
 - CPU: 96 cores AMD
 - 384 slots, 7TB NVME, 1.5TB Ram per server



Migration to EL9

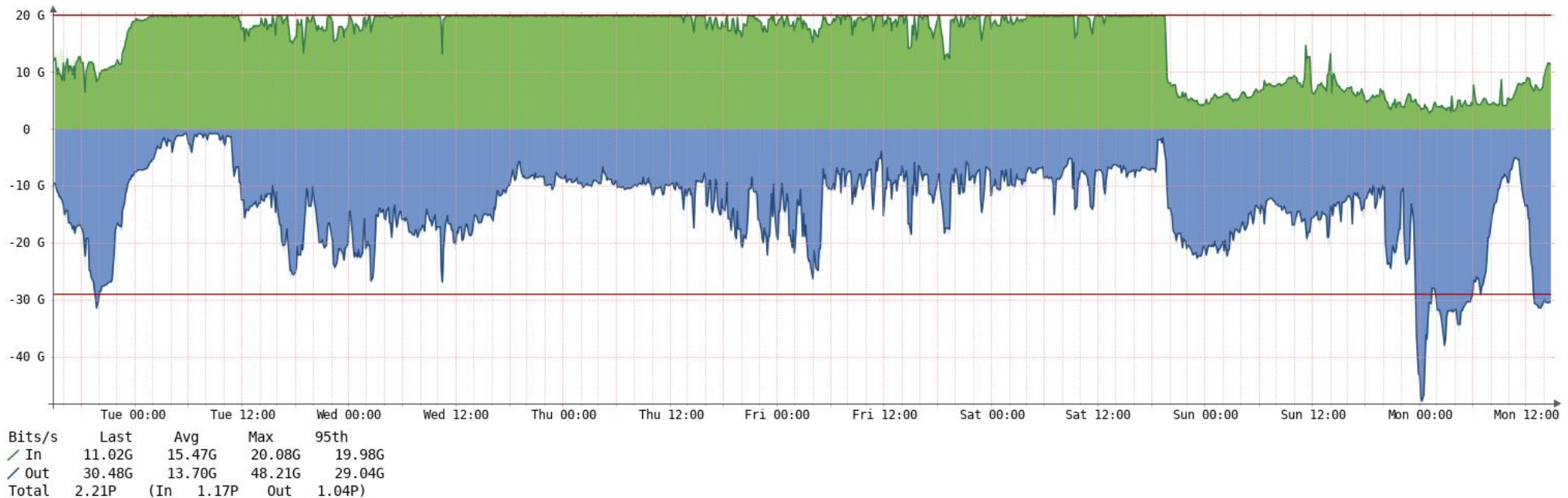
- CentOS deprecated since June 2024
- Very late as EGI is lacking manpower and released required middleware very very late
- Ongoing for cluster
- Default for all new systems installed
 - Already have some M machines (M9,M10,M11)
 - New WN's are installed in EL9
- All other machines are migrating smoothly without your knowledge



AlmaLinux

Network

- Bandwidth: 20 Gbps to Geant (incoming)
 - We passed the data challenge (February 2024)
 - Bandwidth scaled wrt to the offered storage capacity
 - Sustained max capacity for hours
 - It is however clear we soon will need more
 - VUB network team is currently too busy with new datacenter in Zellik



Challenges

- **Usage of M machines**
 - Two machines running on hardware (56 cores)
 - People started running jobs on it
 - Better use the cluster instead
 - Big shift towards running vscode servers
 - Daily reboot needed
- **Ceph (/user)**
 - Resolved issues we had at the beginning
 - Still some situations it doesn't like
 - Reading same file with > 1000 jobs
 - Our expertise is growing and we can solve cases more easily
 - Unfortunately it is less stable than expected
- **dCache (/pnfs)**
 - CMS scans namespace using xrootd federation
 - Slowed the system down (nfs access)
 - We drastically reduced the amount of resources for this use case

T2B hardware location

- Discussions are still ongoing
- **Option 1:** Nexus in Zellik
 - Expensive but state of the art
 - If move: by March 2025
- **Option 2:** Stay in building O
 - Still some unknowns about the cooling and the works needed to host us in a future proof way.
 - Recent shutting down of machines to test cooling
- Is at the level of the vice rectors now
 - meeting took place on November 7th
 - result unknown

The IT team



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Thanks !
Questions ?

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