

**Annual Meeting of the BMBF-funded Research Compound  
"Föderiertes Computing für die ATLAS- und CMS-Experimente am Large Hadron Collider in Run-3"**

# **Status Universität Hamburg "Computing für das CMS-Experiment in Run-3"**

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(Universität Hamburg)

# Person power & funding

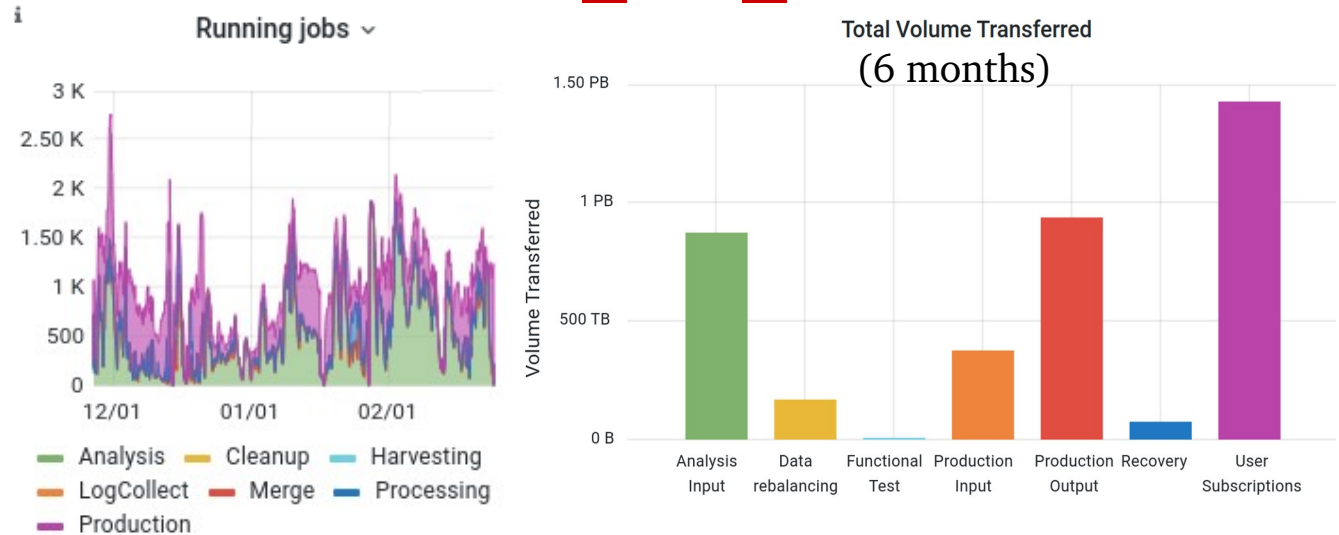
- combined computing funding  $1 \frac{2}{3}$  FTE: **A+C Computing in Run 3** (1) + FIDIUM ( $\frac{2}{3}$ )
  - 1 FTE fully financing 1 PostDoc
  - two PhD students  $\frac{1}{3}$  FTE each  
(another  $\frac{1}{3}$  FTE each from local CMS analysis project)
- assures good integration of **A+C Computing in Run 3** with analysis activities and FIDIUM project
- further involved staff (“Eigenmittel”):
  - (Johannes Haller)
  - JL
  - Hartmut Stadie

# Task overview

- A: Tier-2 specific tasks
  - operations and quality assurance of CMS-specific services
  - development and adaption of common tools
  - user space management at Tier-2
- B: User support
  - user support T1&T2
  - user support for the NAF and CMS utilization of the NAF
  - development and adaption of common tools

# A: Tier-2 specific tasks (T2\_DE\_DESY)

- overall smooth operation

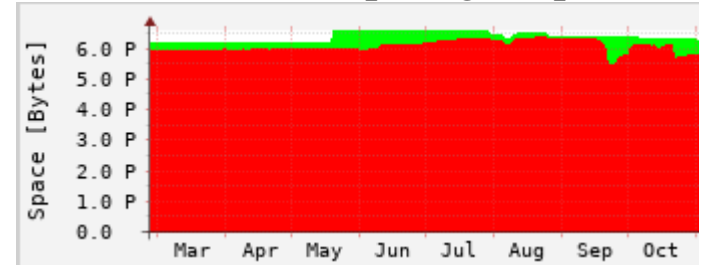


- move from GridKa-CA personal grid certificates to GÉANT caused many problems
  - some very specific to UHH (e.g., DN contains a comma) (*solved*)
  - some general (e.g., root CA not trusted by servers running services) (*mostly solved, but student certificates do not work at all, yet – still trying to find the right experts for further debugging*)

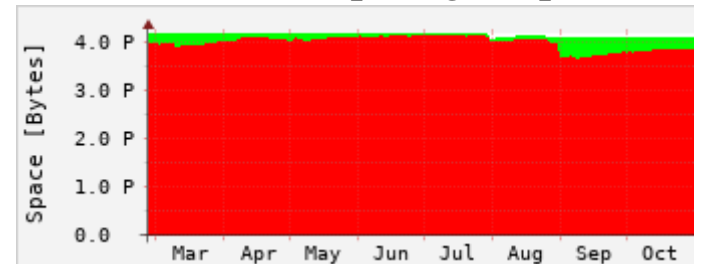
# A: Tier-2 specific tasks (T2\_DE\_DESY)

- adaptations of services to rucio usage
  - larger obstacles in the management esp. of local-user-created rules within CMS
  - some are solved or “worked around”, others still in active discussion in CMS
- user space management further optimized
  - regular evaluation of access monitoring
  - automatic creation of user directories for D-CMS members
  - systematic determination of ex-users

dCache store poolgroup



dCache user poolgroup

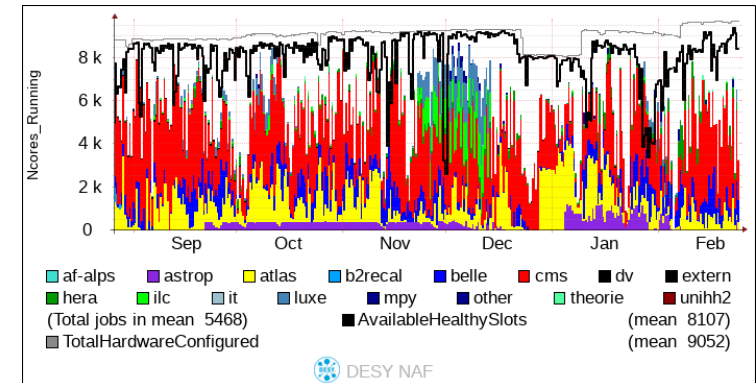


UHH approx. 2PB

# B: User support

- contributing to Germany-wide CMS support team (T1, T2, NAF)
  - esp. responding to questions/problems related to tools developed in Hamburg
- adaption of software environment(s) for CMS@NAF,  
usage of CMS data@NAF,  
representation in NAF user committee
- maintenance/development of the  
grid-control job submission tool
  - transitions    PhEDEx → rucio,  
                          siteDB    → CRIC

NAF: total > 9000 cores  
UHH approx. 2000 cores



# Outlook

- continuation of basically all of the aforementioned items
- deployment and adaption of HappyFace4 for Hamburg

Thanks for your attention!

# BACKUP



# Mandates in the computing area

Hartmut Stadie	CMS representative in the NAF users committee	since 2008
Marcel Rieger	Coordinator of the CMS “Machine learning production” group	06/2020-08/2022
Johannes Lange	Coordinator of the German CMS computing team	since 11/2021
Marcel Rieger	Coordinator of the “Workflows and Analysis Preservation” group	since 02/2023