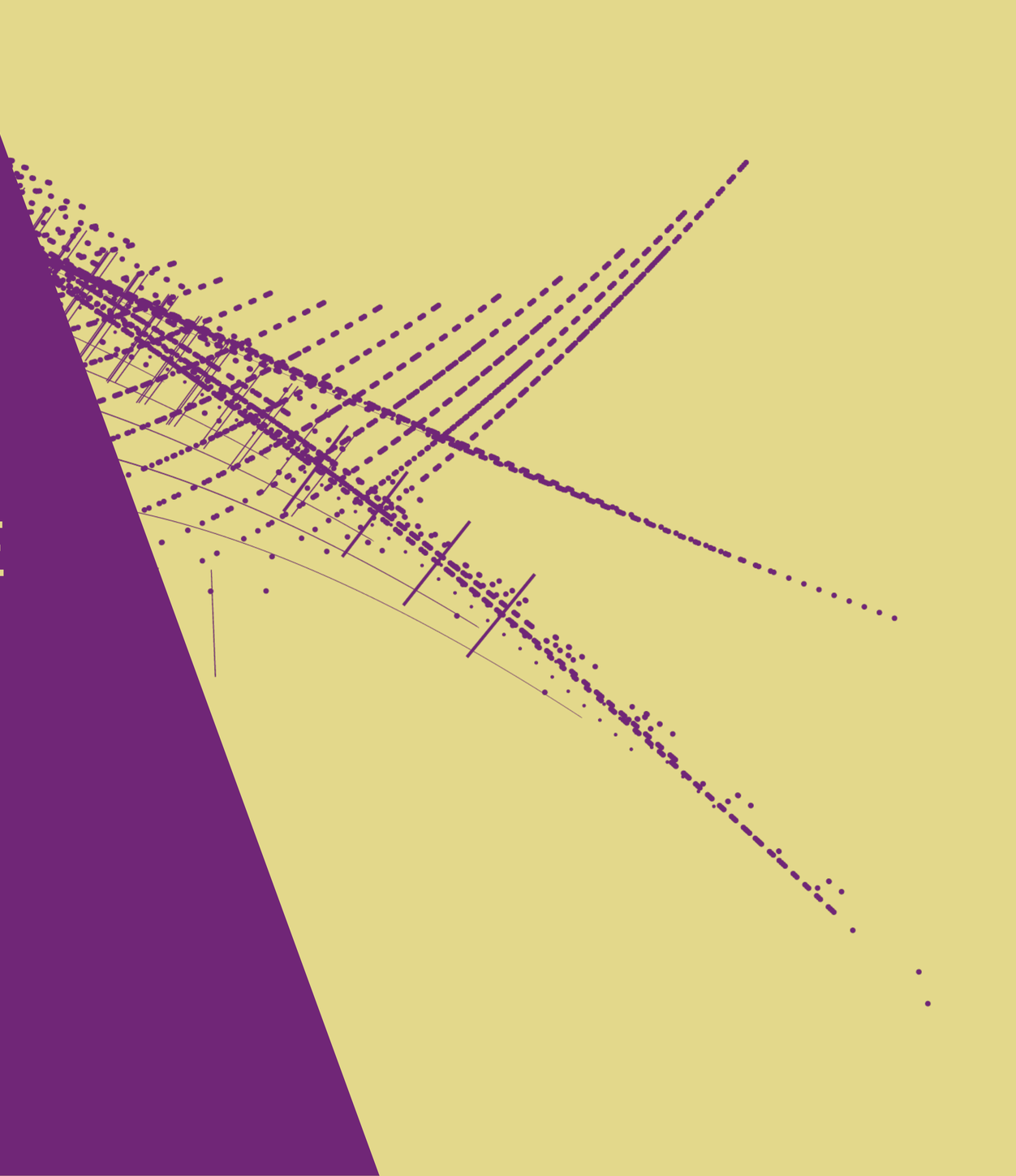
Nikhef

PHYSICS DATA PROCESSING PROGRAMME



PDP PROGRAM MISSION

Ensure that physics reach of Nikhef experiments is never limited by computing, through R&D on scientific computing, R&D on collaborative computing, operation of / contribution to local, national, and international computing infrastructures for science.

LINK TO LAST YEAR'S NIKHEF JAMBOREE PRESENTATION

THE PROGRAM

Advanced Computing Technology (ACT)

- software defined networking
- architectures for virtualized platforms
- future storage architectures (HL-LHC)

Infrastructure for Collaboration (I4C)

- move “grid” in direction of “GAFA”
- still keep it secure

THE PROGRAM

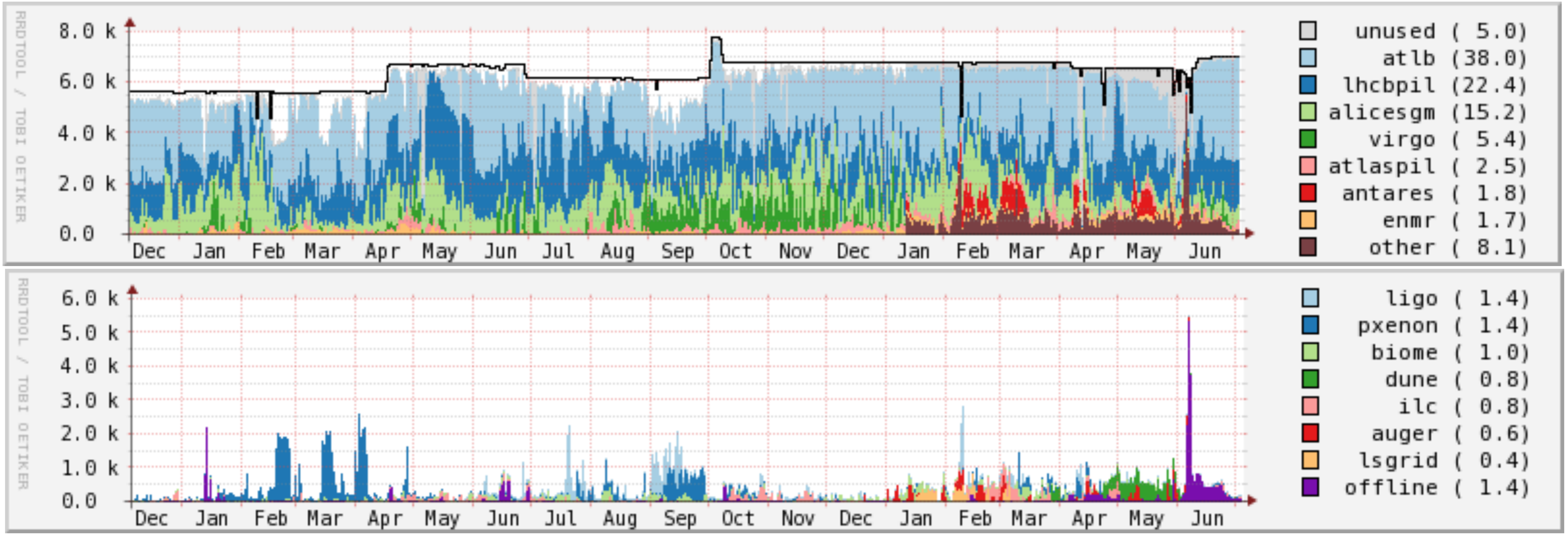
Advanced Computing Technology (ACT)

Infrastructure for Collaboration (I4C)

Research Infrastructures (RI)

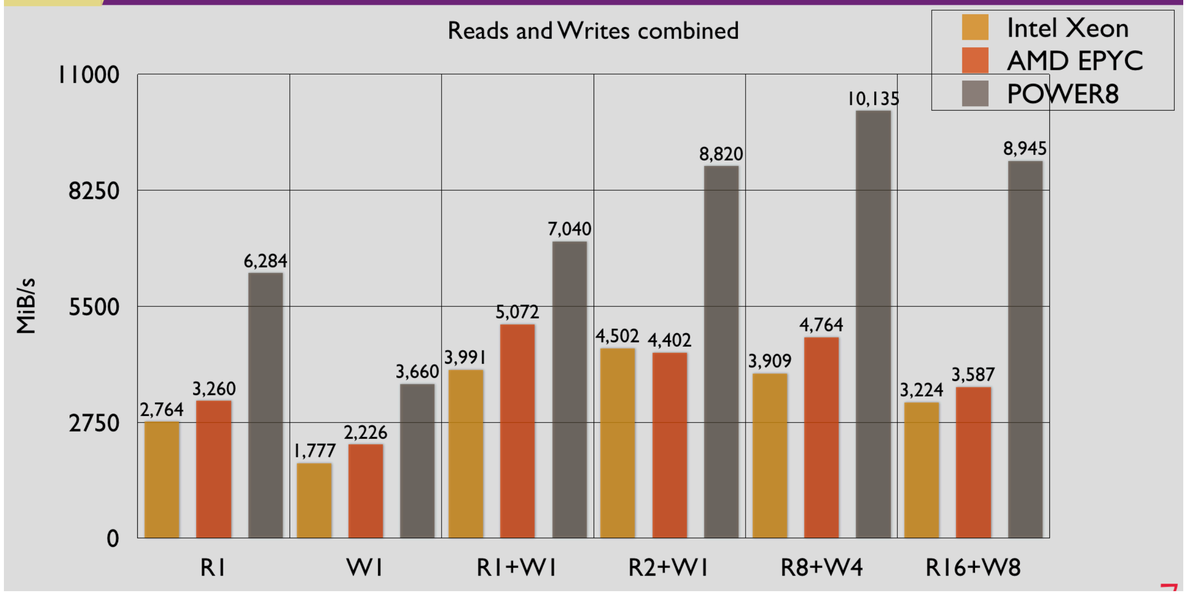
- local analysis facility “stoomboot” + HT storage
- LHC Tier-1, VIRGO, XENON, DUNE, general purpose “NDPF”

USAGE LAST YEAR : COMPUTING, DNI @ NIKHEF



kipsaté cluster: largest AMD EPYC cluster in Benelux

The results!



Prototype Data Transfer Node

THE PROGRAM

Advanced Computing Technology (ACT)

Infrastructure for Collaboration (I4C)

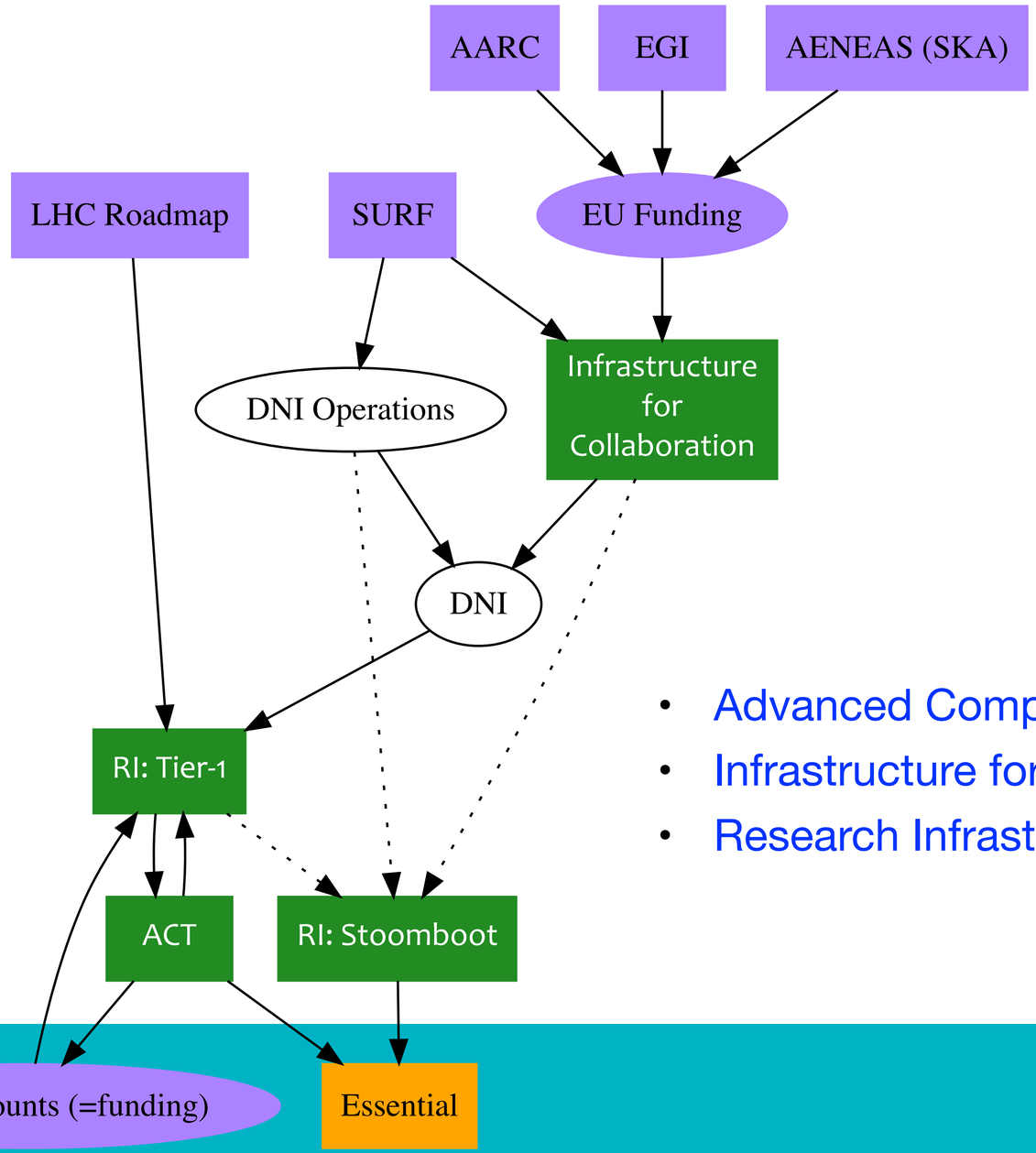
Research Infrastructures (RI)

- local analysis facility “stoomboot” + HT storage
- LHC Tier-1, VIRGO, XENON, general purpose “NDPF”

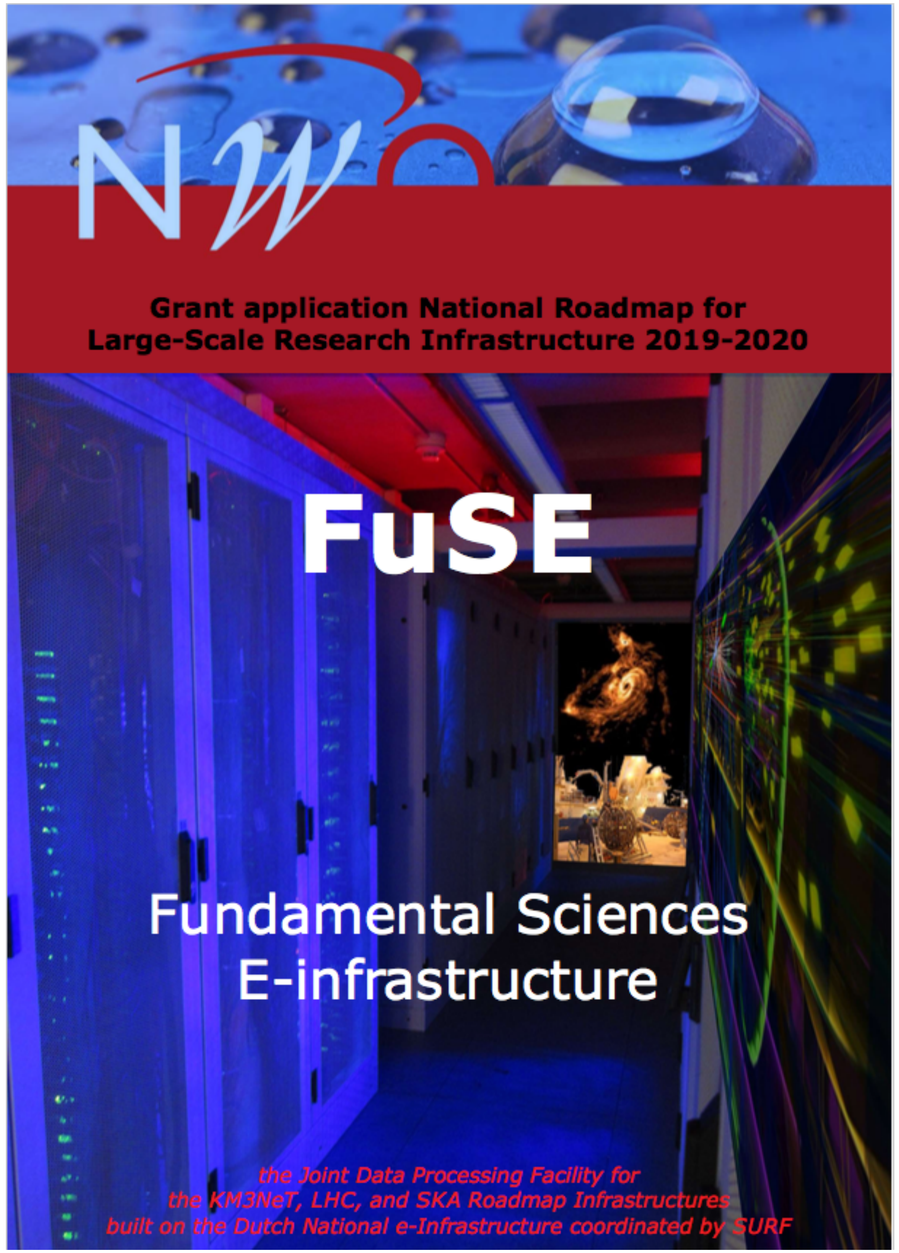
Applied Advanced Computing (AAC)

- R. Aaij hired 2018 - GPU applications

ORGANIZED BY LINKS & FUNDING



- Advanced Computing Technology (ACT)
- Infrastructure for Collaboration (I4C)
- Research Infrastructures (RI)



- Essential Funding for Joint Tier-1 (2021-2025)
  - LHC
  - SKA
  - KM3NeT
- Harvest Science for our (with ASTRON) approved National Roadmap infrastructures
- Einstein Telescope in next round
- *Embedded in the DNI*