

*SDC-FI*

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## *SDC-FI at CSC*

- SDC-FI operates at the Finnish national computing center CSC
- SDC-FI is based on virtual machines (VM) on the CSC main cluster
- We can also use the cluster directly and CSC has also a Cray supercomputer that we can use

# *CSC – the Finnish national computing center*

- Two main computers
- Cluster “Taito”
  - this is where the SDC-FI VMs run
  - HP cluster with 985 nodes and 18024 cores
  - different size nodes
    - 16 or 24 cores; 64 GB, 128 GB, 256 GB; two nodes w 32 cores and 1.5 TB
  - The operating system of the cluster is CentOS6, but our recent Euclid VMs on it have CentOS7
- Supercomputer “Sisu”
  - Cray XC40 with 1688 nodes
  - each node has 24 cores and 64 GB
  - Number 50 in the TOP500 list

## *Virtual machines*

- VMs run on 16 core nodes with 64 GB
- The VM sizes available are:
  - 1 core with 3.5 GB
  - 4 cores with 15 GB
  - 8 cores with 30 GB
  - 12 cores with 45 GB
  - 16 cores with 60 GB
- Our current quota at CSC is up to 160 cores, 80 VMs, 10 TB disk space, and 500 000 core-h (we can request more when we have used this)

## *New hardware*

- We have funding (500 k€) to purchase new hardware in 2016-20 for Euclid
- This will extend the existing CSC hardware
  - but would guarantee our use of it
- New compute nodes purchased in 2016 will have:
  - 24 cores and 256 GB
- CSC will likely purchase such nodes anyway
  - availability: in April?
- We need estimates of OU-SIM needs for SDC-FI, so we can plan purchases and divide the budget per year