JURECA

First modular supercomputer worldwide

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Organization

- Forschungszentrum Jülich is a interdisciplinary research centre in Germany;
- Institute for Advanced Simulation (IAS);
- Jülich Supercomputing Centre (JSC);
    - Supercomputing centre since 1987;

Managed supercomputers

- JUSUF;
- JUWELS (position 31[1]);
    - Helped Google demonstrate the quantum supremacy (source);
        - Quantum computer: 200 seconds;
        - Fastest supercomputer: 10.000 years;
- JURECA (position 56[1]);
    - The name is short for Jülich Research on Exascale Cluster Architectures;

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[1]November 2019 ranking.

- 2015-04: begins to operate the cluster;
- 2017-11: included a buster module;
- First modular supercomputer worldwide (source);

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JURECA Cluster

- Dual-socket Intel Xeon E5-2680 v3 Haswell
- NVIDIA K40 and K80 GPUs
- 128/256/512 GiB memory per node (DDR4 @ 2133 MHz)
- 1884 compute nodes → 45.216 cores
- InfiniBand EDR (100 Gbps per link and direction)

- asdaf

Sample frame title

In this slide, some important text will be highlighted because it's important. Please, don't abuse it.

> **Remark**
>
> Sample text

> **Important theorem**
>
> Sample text in red box

> **Examples**
>
> Sample text in green box. The title of the block is "Examples".

Two-column slide

This is a text in first column.

$$E = mc^2$$

- First item
- Second item

This text will be in the second column and on a second tought this is a nice looking layout in some cases.

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Sample frame title

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- Text visible on slide 1

Sample frame title

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- Text visible on slide 1
- Text visible on slide 2

Sample frame title

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- Text visible on slides 3

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- Text visible on slide 4

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Other resources

- Time lapse video of the installation
- Jülich Supercomputing Centre