HPC in cross border region

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What do we have at Trieste:

- Network of excellent research Institutes, where simulation is one of the main tool.

- Facts:
  - SISSA/DEMOCRITOS users computed for about 7.2 million CPU hours locally in 2011 and at least 3 more time all around the world
  - SISSA/ICTP signed an agreement to build a 150TF system in 2013 and to open a university master in HPC
  - Spin-off companies are born in such Environment
A CNR/IOM spin-off company

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**eXperience on advanced computational technologies**

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All the components of an HPC ecosystem are present

- HARDWARE
- BRAINWARE
- SOFTWARE
- Computational needs (problems)
Interact/capitalize/grow : the HPC5 challenge

• Leverage on HPC competences on the Italian/Slovenian border to:
  – STIMULATE HPC needs in SME
  – KNOWLEDGE exchange with ACADEMIA
  – Make business
Our HPC5 integrated vision:

- Computational Needs: Both in SMEs and Research centers

- Competence Center:
  - Identify/analyze/stimulate requests and needs
  - Identify the right platforms for the right need

- HPC5 infrastructures:
  - HPC
  - GRID
  - CLOUD
  - LOCAL
In the cross-border regions there are:
- HPC infrastructure
- competences
- needs

TODAY

TOMORROW

HPC5
Integrated ecosystem
ready to a world wide challenge

$220 Billion over 6 years
CAGR 8.3%