



© Forschungszentrum Jülich / Sascha Kreklau

JUPITER AND ITS AI FACTORY

**AI Factories and High Performance Computing:
Regions in Dialogue for European Digital Sovereignty**



80 EXAFLOP/S 8 BIT AI PERFORMANCE

JUPITER Booster
Large-Scale Simulations & AI

7 double containers

125 Racks BullSequana XH3000

20 Racks per double container

6000 nodes

4 × NVIDIA Grace-Hopper superchips per node

4× NDR200 NICs per compute node

30 PB Flash, 310 PB HDD, 370 PB TAPE

17 MW for LINPACK

EVIDEN

STRATEGIC DOMAINS OF JAIF



Health



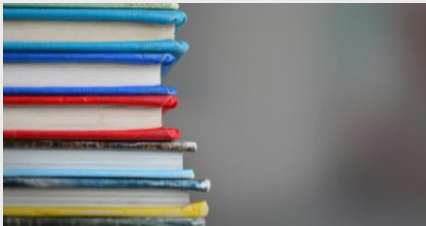
Energy



Climate Change and Environment



Education, Culture and Media



Public Sector



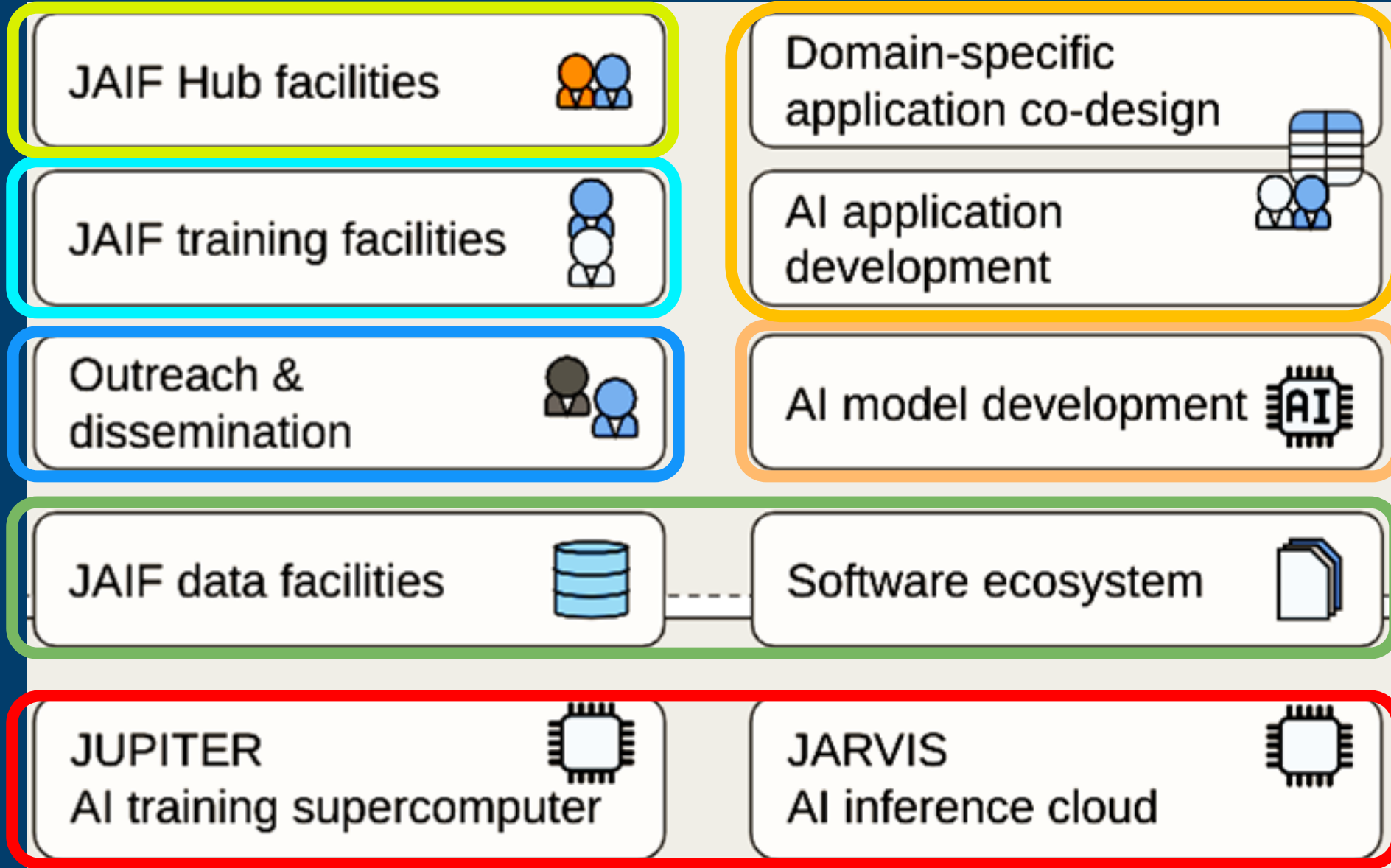
Finance and Insurance



Manufacturing



JAIF SERVICES



INNOVATIVE AI MODELS BY STARTUPS: DRAGON LLM



Training frugal, state-of-the-art foundational large language models at unprecedented scale for European languages

(Jean-Gabriel Barthelemy, Lingua Custodia)



How do the dynamics in **turbulent hydrogen flames** change at technically-relevant conditions?

(JAIF, TU Darmstadt, Siemens Energy)