

JSC to participate in four Horizon2020 Centres of Excellence

On May 8, the results of a keenly contested call for new "Centres of Excellence" within the EU Horizon2020 E-INFRASTRUCTURES Programme were announced [1]. These new funding instruments are intended to harness computational science and big data expertise in HPC in the promotion of scientific discovery and industrial competitiveness. Out of the 20 submitted proposals, 8 projects were approved for initial funding and 4 of these will include active JSC participation – see Table 1 and Ref. [2] for an overview. These four are: POP - Performance Optimisation and Productivity; MaX - Materials Design at the Exascale; E-CAM - an E-infrastructure for Software, Training and Consultancy in Simulation and Modelling; and EoCoE - an Energy-oriented Centre of Excellence. All projects – subject to final approval by all participants – plan to start in the autumn of this year.

EoCoE

EoCoE ("echo"), coordinated by the Maison de la Simulation at CEA, France, received the highest grade of the evaluation, and aims to exploit the prodigious potential offered by the maturing HPC infrastructure to foster and accelerate the European transition to a reliable, low-carbon energy supply. EoCoE will achieve its goal via targeted support of four distinct renewable energy pillars: Meteorology (Wind), Materials (Earth), Hydrology (Water) and Fusion (Fire), each of which boasts activities with a heavy reliance on numerical modelling. From the project outset these four pillars will be anchored within a strong

Coordinator	Partners	Acronym	Proposal Title
CEA	13	EoCoE	Energy oriented Centre of Excellence for computer applications
DNR	12	MaX	Materials design at the eXascale
UCD	18	E-CAM	An e-infrastructure for software, training and consultancy in simulation and modelling
BSC	6	POP	Performance Optimisation and Productivity
DKRZ	16	ESIWACE	Excellence in Simulation of Weather and Climate in Europe
POTSDAM	10	COEGSS	Center of Excellence for Global Systems Science
KTH	11	BioExcel	Centre of Excellence for Biomolecular Research
MPG	11	NoMaD	The Novel Materials Discovery Laboratory

Table 1: Summary of approved EU Centres of Excellence.

transversal multidisciplinary basis providing high-end expertise in applied mathematics and supercomputing science. EoCoE is structured around a central Franco-German hub coordinating a pan-European network, gathering a total of 8 countries and 23 teams, including 5 separate FZJ units from JSC, IEK and IBG. Its partners are strongly engaged in both the HPC and energy fields; a prerequisite for the long-term sustainability of EoCoE and also ensuring that it is deeply integrated in the overall European strategy for HPC.

References

- [1] http://ec.europa.eu/research/participants/portal/doc/call/h2020/h2020-einfra-2015-1/1860102-h2020-einfra-2015-1_flash_call_info_en.pdf
- [2] <http://www.prace-ri.eu> (needs update)

contact:
Paul Gibbon,
p.gibbon@fz-juelich.de

• Paul Gibbon

Forschungszentrum
Jülich, Germany