



# **BUILDING GLOBALLY COMPETITIVE EUROPEAN HPC TECHNOLOGY**

## **ETP4HPC NEWSLETTER**

**JANUARY – MARCH 2017**

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# 6 OTHER NEWS

## 6.1 HIPEAC VISION 2017

10/01/2017

HiPEAC's domain (High Performance and Embedded Architecture and Compilation) – computers, programmable systems, processors, microcontrollers etc. – is evolving very rapidly and has a far-reaching impact on our everyday life.

The aim of this 2017 HiPEAC Vision is to highlight some of the ongoing evolutions in this domain and to outline a number of recommendations to steer it.

'This document deals extensively with 'societal trends', 'market trends' and 'the position of Europe in the world'; these are the areas in which we have found the most changes since the HiPEAC Vision 2015. The 'technological trends' sections only contain the new topics not detailed in the previous version of the document. This document could be used as input for the Horizon 2020 calls in 2018/2019, leading to research activities up to 2022-2023, and to commercial exploitation in the 2025-2030 timeframe. Hence, the challenge is to try to find out today which type of computing systems, new approaches, new technologies, new systems and applications will be important ten years from now! '

You can continue reading 'HiPEAC Vision 2017' at: <https://www.hipeac.net/v17>

Also, you can see a summarised version through this [video](#).

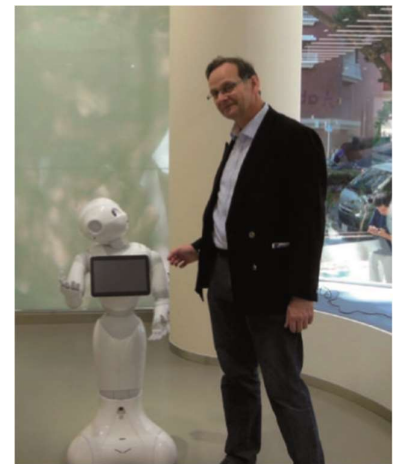
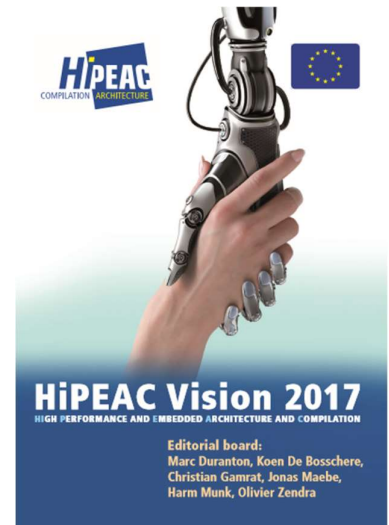
<http://www.etp4hpc.eu/en/news/114-hipeac-vision017.html>

## 6.2 PRACE 2, March 20, Amsterdam

20/03/2017

On the occasion of the 25th PRACE Council Meeting in Amsterdam, the PRACE Members ratified a Resolution to proceed with the second phase of their Partnership: PRACE 2. You can read more [here](#).

<http://www.etp4hpc.eu/en/news/127-25th-prace-council-meeting-march0-amsterdam.html>



Pepper (originally developed by Aldebaran, now part of Softbank) arguing its point on the impact of companion robots to the HiPEAC Vision Coordinator.



PRACE C members on the occasion of the 25th PRACE Council Meeting

# 7 5. UPCOMING EVENTS

## 7.1 PRESS RELEASE: EUROPEAN HPC SUMMIT WEEK 2017 IN BARCELONA

29/03/2017

The European HPC ecosystem event: this second edition offers a wide variety of workshops covering a number of application areas where supercomputers are key, as well as HPC technologies and infrastructures



Barcelona, 28 March 2017. -The European HPC Summit Week 2017 edition ([EHPCSW17](#)) will include even more HPC workshops than the 2016 edition, covering a range of application areas including renewable energies, oil & gas, biomedicine, big data, mathematics, climate modelling, computing applications, as well as HPC future technologies. This year's edition will take place 15-19 May in Barcelona, Spain, and will be hosted by [Barcelona Supercomputing Center](#). It will be a great opportunity to network with all relevant European HPC stakeholders, from technology suppliers and HPC infrastructures to HPC scientific and industrial users in Europe.

“For EHPCSW17 we took on the important challenge of accommodating numerous HPC-related workshops. Our aim is to make the European HPC Summit Week a reference in the HPC ecosystem, and to create synergies between stakeholders,” says Sergi Girona, EXDCI project coordinator.

The programme starts on Monday with the [EXDCI workshop](#), which will give an overview of EXDCI recent activities including the HPC vision and recommendations to improve the overall HPC ecosystem. [PRACEdays17, the fourth edition of the PRACE Scientific and Industrial Conference](#), will take place from Tuesday morning until midday Thursday, and, under the motto HPC for Innovation: when Science meets Industry, will have several high-level international keynote talks, parallel sessions and a panel discussion.

On Tuesday afternoon, and in parallel to PRACEdays17, three additional workshops organised by HPC Centers of Excellence will take place:

[CompBioMed: HPC?based computational biomedicine;](#)  
[HPC for renewable energies: new programming models and strategies for the emerging exascale architectures](#) and  
[ENES / ESIWACE HPC Workshop](#).

In the late afternoon, a poster session, with a welcome reception sponsored by PRACE, will close the events of the day. On Wednesday afternoon, EuroLab4HPC will organise its workshop [The Future of High-Performance Computing](#) in parallel to the workshop [Mathematics for Exascale and Digital Science](#).

On Thursday afternoon, the European Technology Platform for HPC (ETP4HPC) will organise a round-table entitled [Exploiting the Potential of European HPC Stakeholders in Extreme-Scale Demonstrators](#) in parallel to the [EUDAT workshop: Coupling HPC and Data Resources and services together](#). The week will finish with scientific workshops organised by FETHPC projects and Centers of Excellence:

[HPCAFE-2017: High-Performance Computing Approaches for Monitoring, Exploring, Optimizing and Autotuning](#)  
[NextGenIO /SAGE workshop: Working towards Exascale IO](#)  
[POP User Forum: Help us, help you! - Help us improve the POP Service so that we can help you improve your HPC Applications](#)

The full programme is available online at <https://exdci.eu/events/european-hpc-summit-week-2017>. The registration fee is €60 and those interested in attending the full week (or part of it) should fill out the centralised registration form by 5 May: <https://exdci.eu/events/european-hpc-summit-week-2017>

#### About the EHPCSW conference series

EXDCI coordinates the conference series “European HPC Summit Week”. Its aim is to gather all related European HPC stakeholders (institutions, service providers, users, communities, vendors and consultants) in a single week to foster synergies. Each year, EXDCI opens a call for contributions to all HPC-related actors who would like to participate in the week through a workshop.

This [first edition](#) took place in 2016 (EHPCSW16) in Prague, Czech Republic. The EHPCSW16 gathered a total 238 attendees with nearly all European nationalities represented. The four-day summit comprised a number of HPC events running concurrently: an EXDCI Workshop, PRACEDays16, the “EuroLab4HPC: Why is European HPC running on US hardware?” workshop and the ETP4HPC Extreme-Scale Demonstrators Workshop, as well as a number of private collaborative meetings.

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Press release in PDF format:

[https://exdci.eu/sites/default/files/public/content/news/attachment/ehpcsw17\\_press\\_release.pdf](https://exdci.eu/sites/default/files/public/content/news/attachment/ehpcsw17_press_release.pdf)

URL: <https://exdci.eu/newsroom/press-releases/european-hpc-summit-week-2017-barcelona-gather-main-hpc-stakeholders-europe>

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Tel. (0034) 934015864

## 7.2 COMBIO MED MEETING ON CLOUD & HPC IN BIOMEDICINE, APRIL 27, LONDON

27/04/2017

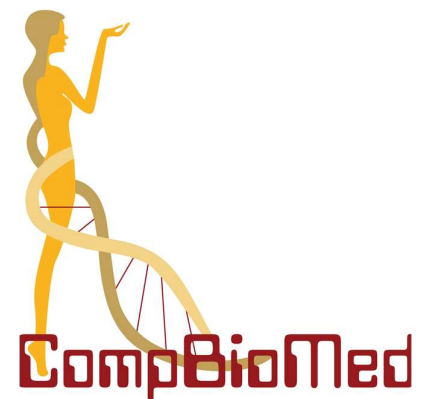
Horizon2020 Centre of Excellence in Computational Biomedicine is hosting a free one-day event to showcase and discuss Cloud and High Performance Computing capabilities.

Hugo Falter, ETP4HPC Secretary, shall be attending this event.

The event details and registration can be found [here](#).

Venue: Christopher Infold Lecture Theatre, Department of Chemistry, UCL 20 Gordon Street, London WC1H 0AJ

[http://www.etp4hpc.eu/en/events/combiomed-meeting-on-cloud\\_386.html](http://www.etp4hpc.eu/en/events/combiomed-meeting-on-cloud_386.html)



## 7.3 EUROPEAN HPC SUMMIT WEEK 2017, MAY 15-19, BARCELONA

From 15/05/2017 to 19/05/2017

The second edition of the European HPC Summit Week will take place in Barcelona, Spain

ETP4HPC will be participating in this summit week and will also organise a discussion on the 3rd edition of its Strategic Research Agenda (SRA 3), the European HPC Technology roadmap. ETP4HPC maintains the SRA in order to feed recommendations into the EC HPC Work Programmes and Calls for Proposals. This discussion will focus on the input of the ETP4HPC SRA Working Groups and other stakeholders in order to produce a final draft of



the document due to be published in Q3 2017. Other stakeholders are invited to take part in this discussion, familiarise themselves with SRA 3 and comment on the appropriateness of the guidelines included.

Also, please find the programme for the Workshop on Mathematics and Algorithms organised by Vassil Alexandrov of BSC-CNS on the afternoon of the 17th May [here](#).

More details coming soon at: <https://exdci.eu/events/european-hpc-summit-week-2017>

Venue:

Vertex Building, Campus Nord UPC  
Plaza Eusebi Güell  
Barcelona, Spain (Map)

[http://www.etp4hpc.eu/en/events/european-hpc-summit-week017-may5-19-barcelona\\_368.html](http://www.etp4hpc.eu/en/events/european-hpc-summit-week017-may5-19-barcelona_368.html)

## 7.4 EXTREME-SCALE DEMONSTRATORS ROUND-TABLE, MAY 18, 2017, BARCELONA

18/05/2017

Extreme-scale Demonstrators Round-table

Exploiting the Potential of European HPC Stakeholders in Extreme-Scale Demonstrators

18th May 2017, 2-7pm, Barcelona @ European HPC Summit Week

ETP4HPC, the European HPC Technology Platform, would like to continue the development of its Extreme-Scale Demonstrators (EsDs) concept through a discussion involving all European HPC stakeholders. The concept of European HPC system prototypes has been proposed by ETP4HPC and it is available at: <http://www.etp4hpc.eu/en/esds.html>. The EsDs are research projects aimed at integrating European HPC Technology and Application expertise into fully operational world-class HPC systems. This concept is included in our current EC Work Programme 2018-20 draft and forms the core of the further development of HPC technology in Europe.

The European Technology (FETHPC and other FP) projects, application owners (EXDCI WP3), the Centres of Excellence in Computing Applications (CoEs), technology providers, HPC centres/PRACE and HPC System Integrators will play a pivotal role in this process.





The objective of this peer-to-peer Round-table workshop is to allow ALL STAKEHOLDERS to familiarise themselves with the potential of the European HPC Eco-system on an equal basis with a view to setting up consortia leading to successful EsD projects. It will provide an opportunity for a level-set and discussion before the EsD concept's publication in a WP18-20 call in autumn this year. Representatives of various stakeholder groups (FETHPC projects, application owners (EXDCI WP3), CoEs, integrators, technology providers, HPC centres/PRACE) participating in future EsD projects will have a chance to update one another and jointly develop a position regarding a set of critical project implementation aspects. Most importantly, the FETHPC projects currently under way should share their most likely contributions to the EsD projects. We expect each of the participating FETHPC projects, application owners (EXDCI WP3), CoEs, integrator companies, technology providers and HPC Centres/PRACE to send only ONE representative each.

This workshop will be organised by ETP4HPC on behalf of EXDCI within the European HPC Summit Week:  
<https://exdci.eu/events/european-hpc-summit-week-2017>

We will also send an invitation and all the necessary information prior to the event. There will be a registration process in place through which we will ask you to confirm your attendance.

We are looking forward to working on this initiative with you.

[http://www.etp4hpc.eu/en/events/extreme-scale-demonstrators-round-table-may80\\_393.html](http://www.etp4hpc.eu/en/events/extreme-scale-demonstrators-round-table-may80_393.html)

## **7.5 SRA 3 WORKSHOP - EUROPEAN HPC SUMMIT WEEK, MAY 19, BARCELONA**

19/05/2017

ETP4HPC will host a SRA 3 Workshop 'Developing SRA Strategic Analysis and High-Level Technical Analysis' during the second edition of the European HPC Summit Week, which will take place at UPC in Barcelona, from the 15th to the 19th of May.

This workshop is based on the 3rd edition of its Strategic Research Agenda, the European HPC Technology roadmap. ETP4HPC maintains the SRA in order to feed recommendations into the EC HPC Work Programmes and Calls for Proposals.

The agenda of the workshop will include a review of a draft of the general components of the SRA (which we will have started working on prior to this event) and also finalising with a high-level



technical analysis/summary. This is in order to produce a final draft of the document due to be published in Q3 2017.

This workshop will take place from 9 to 11am in the Auditori of the Vertex Building, Campus Nord UPC, Plaza Eusebi Güell, Barcelona

Read more details here: <https://exdci.eu/events/european-hpc-summit-week-2017>

[http://www.etp4hpc.eu/en/events/sra-workshop--european-hpc-summit-week-may9-b\\_388.html](http://www.etp4hpc.eu/en/events/sra-workshop--european-hpc-summit-week-may9-b_388.html)

## 7.6 WORKSHOP ON “PREPARING FOR PRACE EXASCALE SYSTEMS”, JUNE 1, JÜLICH, GERMANY

01/06/2017

A mini-workshop on “Preparing for PRACE Exascale Systems” within the WP7 F2F meeting will be held at Forschungszentrum Jülich (FZJ), Germany, on June 1, 2017.

ETP4HPC will be represented at this workshop.

[http://www.etp4hpc.eu/en/events/workshop-on-preparing-for-prace-exascale-syst\\_391.html](http://www.etp4hpc.eu/en/events/workshop-on-preparing-for-prace-exascale-syst_391.html)

## 7.7 DIGITAL ASSEMBLY 2017, JUNE 15-16, VALLETTA, MALTA

From 15/06/2017 to 16/06/2017

Digital Assembly 2017 in Valletta: “Digital Europe: Investing in the Future”

The 2017 edition of the Digital Assembly, hosted by DG Connect and the Maltese Presidency of the Council of the European Union will happen in Valletta, Malta, on the 15th and 16th June 2017 at the Mediterranean Conference Centre.

The Digital Assembly 2017 is an opportunity for stakeholders to debate, take stock and look ahead at how Europe and how its partners around the world are preparing for this digital transformation. It will also be an opportunity to have a dialogue on the benefits of the Digital Union for citizens with a special focus on our younger generations.



2017 will be a key year to assess the progress made with the implementation of the Digital Single Market strategy ahead of the mid-term review, planned for May. It is also the year during which the Commission will start preparing for the next Multi-annual Financial Framework and the role of digital within it. In short, 2017 will mark an important step towards a European Digital Union.

[http://www.etp4hpc.eu/en/events/digital-assembly017-june5-16-valletta-malta\\_379.html](http://www.etp4hpc.eu/en/events/digital-assembly017-june5-16-valletta-malta_379.html)

## 7.8 ISC 2017, JUNE 18-22, FRANKFURT

From 18/06/2017 to 22/06/2017

The 32nd conference in the ISC High Performance series will be held from June 18 – June 22, 2017. The city of Frankfurt remains the preferred location. Apart from addressing HPC under three categories: systems, applications, and emerging technologies, ISC 2017 also presents topics that matter to the ETP4HPC industrial community, especially with regard to the ISC Industrial Day on Tuesday, June 20, and Deep Learning Day on Wednesday, June 21.

Don't miss the [Industrial Day](#) if you are interested in any of these:

- Benefits of exascale computing for industrial users
- How to purchase HPC infrastructure
- Use cases for high performance data analytics (HPDA), including machine/deep learning, AI, and IoT

The day will end with a round-table discussion between industrial HPC users and HPC service and technology providers. This discussion will set the agenda for the Industrial Day at ISC 2018.

Branching into [Deep Learning](#) on the next day, three topics await you:

- How deep learning is changing the HPC landscape
- HPC and big data for autonomous driving and connected vehicles
- Future challenges for deep learning and HPC

Technical talks from academic and industry leaders will give attendees up-to-date insights on the rapid development in this area and also demonstrate how deep learning can be enabled with HPC technology, as well as how the demands of deep learning will affect current and future HPC infrastructure.

The ISC early-bird registration ends May 10. If you register during this period, you can save considerably on the attendance fees. More information is available at [www.isc-hpc.com](http://www.isc-hpc.com).

ETP4HPC will be present at this conference at booth K-419. Come join us there!

[http://www.etp4hpc.eu/en/events/isc17-june8-22-frankfurt\\_383.html](http://www.etp4hpc.eu/en/events/isc17-june8-22-frankfurt_383.html)



JUNE 18 - 22, 2017  
FRANKFURT, GERMANY



## 7.9 SRA/EXTREME-SCALE DEMONSTRATOR WORKSHOP, JUNE 22, FRANKFURT MARRIOTT HOTEL (ISC'17)

22/06/2017

The 32nd conference in the ISC High Performance series will be held from June 18 – June 22, 2017. The city of Frankfurt remains the preferred location.

ETP4HPC will organise a workshop, in conjunction with [ISC'17](#), on SRA 3 and Extreme-Scale Demonstrators, with industrial users on the 22nd of June, in the Frankfurt Marriott Hotel.

More details to follow!



[http://www.etp4hpc.eu/en/events/sraextreme-scale-demonstrator-workshop-june2-\\_369.html](http://www.etp4hpc.eu/en/events/sraextreme-scale-demonstrator-workshop-june2-_369.html)

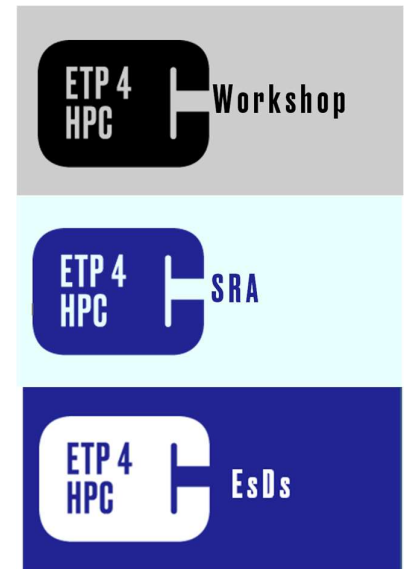
## 7.10 TERATEC 2017 FORUM, JUNE 27-28, PALAISEAU, FRANCE

From 27/06/2017 to 28/06/2017

The Teratec 2017 Forum, will take place between the 28th and the 29th of June at l'Ecole Polytechnique, Palaiseau, France.

The Teratec Forum is a major event in France and Europe that brings together the best international experts in HPC, Simulation and Big Data. It reaffirms the strategic importance of these technologies for developing industrial competitiveness and innovation capacity.

The Teratec Forum welcomes more than 1 300 attendees, highlighting the technological and industrial dynamism of HPC



and the essential role that France plays in this field. The participation and the testimony of senior industrial and ICT leaders, the diversity and the high level of the technical workshops, the representativeness of exhibitors and innovation offers displayed, are assets for all responsible concerned by simulation and high-performance computing.

ETP4HPC will participate in this year's 12th edition and we can be found a Booth# 10. Please do drop by to visit us.

There is a new area dedicated to European research projects and initiatives in the fields of digital simulation, HPC, and Big Data. It's called the [European Research Café](#), where you will find:

- COLOC - The Concurrency and Locality Challenge
- EXDCI
- M2DC
- MONT-BLANC 3
- POP - Performance Optimization and Productivity

For further information on this forum and its activities please visit: <http://www.teratec.eu/gb/forum/index.html/>

[http://www.etp4hpc.eu/en/events/teratec017-forum-june7-28-palaiseau-france\\_374.html](http://www.etp4hpc.eu/en/events/teratec017-forum-june7-28-palaiseau-france_374.html)

## **7.11 E-CAM (CENTRE OF EXCELLENCE) – EXASCALE STATE OF THE ART WORKSHOP, JULY 6-7, BARCELONA**

From 06/07/2017 to 07/07/2017

E-Cam (Centre of Excellence) will organise a workshop 'Exascale State of the Art workshop' on the 6th and 7th of July in Barcelona.

ETP4HPC has been invited to make a presentation on our perspective on HPC hardware. Marcin Ostasz, an ETP4HPC Office expert, shall make this presentation.

More details to follow.

[http://www.etp4hpc.eu/en/events/e-cam-centre-of-excellence--exascale-state-of\\_385.html](http://www.etp4hpc.eu/en/events/e-cam-centre-of-excellence--exascale-state-of_385.html)



## 7.12 ANNUAL ACM EUROPE CONFERENCE: EXDCI FINAL EVENT 2017, SEPTEMBER 7-8, UPC, BARCELONA

From 07/09/2017 to 08/09/2017

UPC North Campus, Vertex Building. Barcelona, Spain

EXDCI will include a workshop within the Annual ACM Europe Conference 2017 that will take place from 6th September until 8th September 2017 in Barcelona, Spain. The idea is to organise a final event jointly with the ACM Europe community that will gather HPC specialists, students and ACM members worldwide. More information coming soon!

[http://www.etp4hpc.eu/en/events/annual-acm-europe-conference-exdci-final-even\\_380.html](http://www.etp4hpc.eu/en/events/annual-acm-europe-conference-exdci-final-even_380.html)



## 7.13 INTERNATIONAL CAE CONFERENCE, NOVEMBER 6-7, VICENZA

From 06/11/2017 to 07/11/2017

The International CAE Conference will take place in Vicenza the 6th and 7th of November.

ETP4HPC will be attending this event.

You can find more details on this event [here](#).

[http://www.etp4hpc.eu/en/events/international-cae-conference-november-7-vicen\\_387.html](http://www.etp4hpc.eu/en/events/international-cae-conference-november-7-vicen_387.html)



## 7.14 ICT PROPOSERS' DAY 2017, NOVEMBER 9-10, BUDAPEST

From 09/11/2017 to 10/11/2017

The event will focus on the Horizon 2020 Work Programme 2018-20 in the field of Information & Communication Technologies. It will offer an exceptional opportunity to build quality partnerships with academics, researchers, industrial stakeholders, SMEs and government actors from all over Europe.

Access your personal profile on "My event" to make the most of the [ICT Proposers' Day 2017](#). Here you can add your ideas and



upload presentations, prepare for networking and/or join various sessions.

The programme will include:

- Information sessions on how to prepare and submit a proposal;
- Information stands on the ICT-related topics of the Work Programme 2018-20 and the content of the calls for proposals;
- A European Commission information desk to supply information on the content and logistics of the event;
- Networking sessions where potential proposers present their project ideas, organised according to the Pillars and Topics of the Work Programme 2018-20;
- Booths, organised by village, which serve as meeting points for people interested in the same research topics;
- Ample space for informal networking and bilateral meetings between participants.
- Workshops and Face2Face Brokerage organised by Ideal-Ist.

[http://www.etp4hpc.eu/en/events/ict-proposers-day017-november-10-budapest\\_390.html](http://www.etp4hpc.eu/en/events/ict-proposers-day017-november-10-budapest_390.html)



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