

# RISC2



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# Consortium

The RISC2 EU project (2020-2023) included 16 partners, from 12 different countries:



TRANSPARÊNCIA  
COPPETEC



UNIVERSIDAD  
DE CHILE



UNIVERSIDAD  
DE LA REPÚBLICA  
URUGUAY



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UNIVERSIDADE D  
COIMBRA



# Mission

The **RISC2** European project aimed to create a network for supporting the coordination of High-Performance Computing research between **Europe** and **Latin America**.

Another main goal was to establish a solid bridge between key players in these regions, namely **researchers** and **innovators** from all areas of society with access to knowledge and tools for developing and deploying HPC-based services.



# Main Objectives

- Assess the **collaboration potential** in the High-Performance Computing, Artificial Intelligence and Computational Science areas in both regions;
- **Raise awareness** of policy makers in the EU and in LATAM about HPC research cooperation and results and facilitate dialogue among policy makers, companies, civil society and the research community;
- **Empower** actors across a broad spectrum of academic, industrial and societal sectors with the necessary knowledge, facilitating training and access to HPC infrastructures and tools;
- Establish **strong relationships** with Latin American HPC networks to co-organise **awareness-raising events** about the EC's ICT R&I programmes;
- **Provide advanced support** services to a selected number of prominent Latin American HPC actors to build long-term relationships with key EU counterparts.



# Outcomes I

- [White Paper on HPC RDI in LATAM](#) presents overview of the HPC activity in Latin America. Includes recommendations for encouraging sustainability in HPC RDI and strengthening bi-regional collaboration.
- [HPC Observatory](#) as relevant source of information for EU and Latin America research communities (Documents, HPC Centres, News)
- **Roadmap for HPC R&I between Europe and Latin America** identifies key technologies and analyses the potential for bi-regional collaboration, including funding schemes, programmes, and initiatives to make collaboration effective
- **Joint Action Plans** are tailored roadmaps for collaboration between the EU and LATAM organisations on topics that show a substantial potential



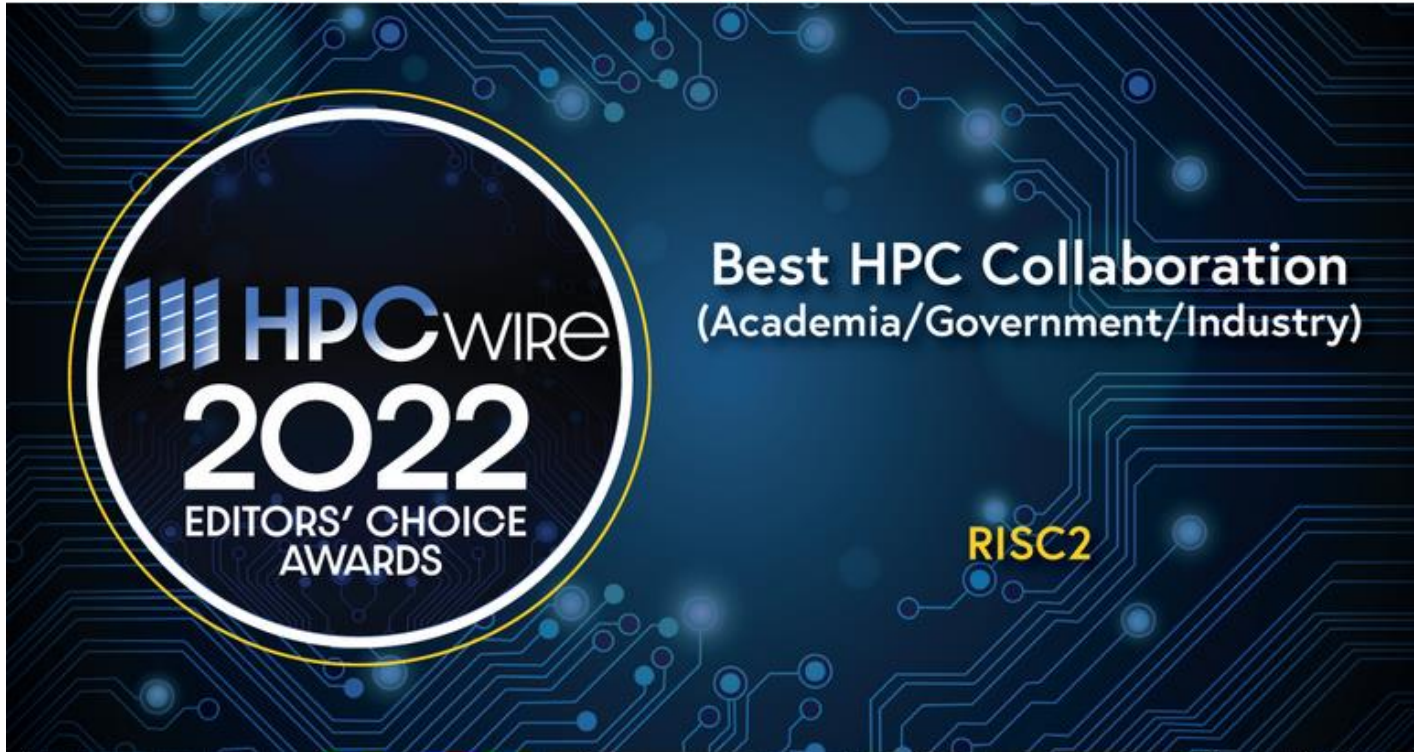
# Outcomes II

- **Organized**
  - 4 Awareness and Networking Events with 455 participants
    - Plus additional 4 networking activities
  - 7 Trainings with 386 students
  - 7 other workshops and related events
  - 8 Webinars with 181 participants
    - 392 registrations
- **Despite the COVID-19 pandemic!**





# HPCwire prized as best HPC collaboration project at SC22



# White Paper on HPC RDI in LATAM

- **Overview of the HPC ecosystem in Latin America**
  - Infrastructure
  - Cooperation projects
  - Coordination and support initiatives
- **National reports for Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico and Uruguay**
  - Strategic goals and plans for the next 3-5 years
  - Strategic aims in Science
  - Strategic aims in HPC
  - Priority HPC research areas
  - HPC infrastructure
  - Strategic goals for collaboration with the EU





# Awareness Raising Event I

- **Co-located with**
  - IEEE Cluster 2022 Conference
  - Heidelberg, Sep 6 2022
- **RISC2 Workshop – HPC for Intl. Collaboration between Europe and Latin America**
  - Keynote Daniele Lezzi (BSC)
  - 6 presentations from project members
  - Published in conference proceedings [DOI: 10.1109/CLUSTER51413.2022]
- **RISC2 Networking Event**
  - Open to all IEEE Cluster participants
  - 105 participants



# Awareness Raising Events II

- **Co-located with**
  - CARLA 2022 Conference
  - Porto Alegre, Sep 26 2022
- **RISC2 Workshop – HPC and Data Sciences meet Scientific Computing**
  - Keynote Luis Lamb (Federal University of Rio Grande do Sul, Brazil)
  - 4 presentations from project members
  - Published in conference proceedings [DOI:10.1007/978-3-031-23821-5]
- **RISC2 / SCALAC Networking Event**
  - 35 participants





# Awareness Raising Event III

- **Co-located with**
  - EU\_CELAC Summit
  - Brussels, Jul 18 2023
- **RISC2 Policymakers Event -- Future of EU-LATAM collaboration on HPC**
  - Hosted by INESC Brussels HUB
  - 27 in-person and 8 remote participants
  - Included Networking dinner



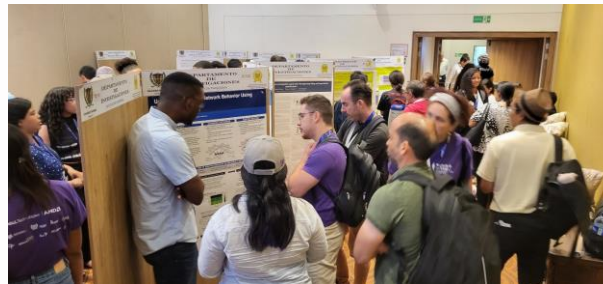
# Awareness Raising Events IV

- **Co-located with**
  - CARLA 2023 Conference
  - Cartagena de Indias, Sep 18 – 22 2023
- **RISC2 / SCALAC / REDCLARA Networking Event**
  - 50 participants



# Awareness Raising Events IV (cont.)

- **Conference Special Talk “RISC2 Results”**
  - Fabrizio Gagliardi (BSC)
- **(RISC2) “EuroHPCLatam Panel: Policy and Global Actions”**
  - Salma Jalife (moderator)
  - Philippe Navaux (SCALAC), Tania Altamirano (Red Clara), Alejandro Forero (CAF), Fabrizio Gagliardi (RISC-2), and María Alejandra Tejada Gómez (Ministerio de CyT CO).
- **Combined RISC2 Networking Event / CARLA 23 Poster Reception**
  - 280 participants





# Training events

- **Costa Rica HPC School 2022 (CRHPCS)**

- San José, Costa Rica, Aug 8-12 2022
- <https://kabre.cenat.ac.cr/hpc2022/>



- **2022 ACM summer school in HPC architectures for AI and dedicated applications**

- Barcelona, Spain, Aug 29 – Sep 2 2022
- <https://europe.acm.org/2022-acm-europe-summer-school>

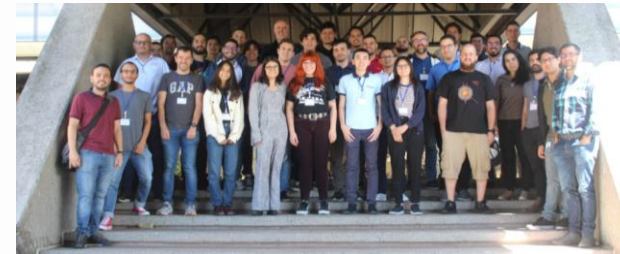
- **First School for HPC Sysadmins of Latin American and the Caribe**

- Santiago de Chile, Chile, Oct 17 – 28 2022
- <https://www.nlhpc.cl/eventos/escuela-hpc-admin-1/>



- **Costa Rica HPC School 2023 (CRHPCS)**

- San José, Costa Rica, Jan 30 – Feb 3 2023
- <https://kabre.cenat.ac.cr/hpc2023/>



# Training events (cont.)

- **Buenos Aires HPC Scool**

- Buenos Aires, Argentina, Mar 13-17 2023
- <http://ecar2023.hpclatam.org/en/>



- **2.6. SCCAMP - International Supercomputing Camp**

- Cartagena de Indias, Colombia, Mar 13 – 17 2023
- <https://sc-camp.org/2023/>



- **2023 ACM summer school in HPC architectures for AI and dedicated applications**

- Barcelona, Spain, Jul 2 – 7 2023
- <https://europe.acm.org/hpc-summer-school>



# Webinars Series “HPC System and Tools”

[Getting Scientific Software Installed: From EasyBuild to EESSI](#) (Aug 24 2022)

Kenneth Hoste, Ghent University



[Interactive High-Performance Computing with JupyterLab](#) (Sep 21 2022)

Jens Henrik Göbbert, Jülich Supercomputing Centre



[Application Benchmarking with JUBE: Lessons Learned](#) (Oct 19 2022)

Marc-André Hermanns, RWTH Aachen



[HPC system and job monitoring with LLview](#) (Dec 7 2022)

Vitor Silva and Filipe Guimarães, Jülich Supercomputer Centre



[Developing complex workflows that include HPC, Artificial Intelligence and Data Analytics](#) (Feb 22 2023)

Rosa M. Badia, Barcelona Supercomputing Center



[A roadmap to quantum computing integration into HPC infrastructures](#) (Mar 15 2023)

Alba Cervera Lierta, Barcelona Supercomputing Center



[Improving energy-efficiency of High-Performance Computing clusters](#) (Apr 26 2023)

Lubomir Riha and Ondřej Vysocký, IT4Innovations National Supercomputing Center



[Addressing the challenges of scientific visualization in the Exascale age](#) (May 31 2023)

João Barbosa, INESC TEC and University of Minho





# Thank you!

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