

RISC2



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101016478

WP2

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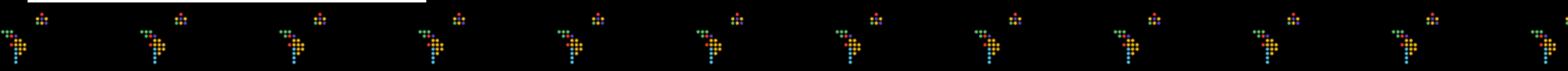
The HPC Observatory



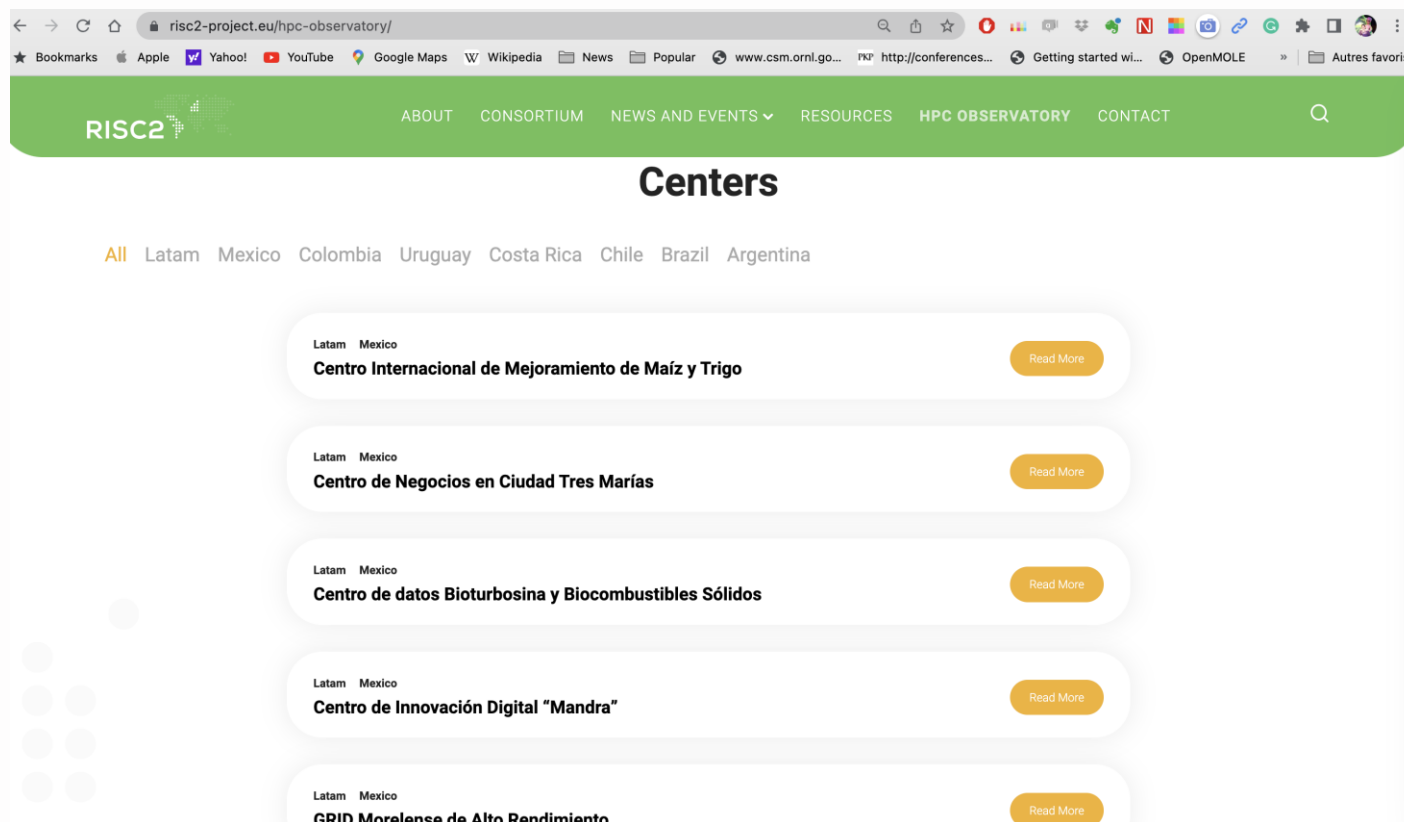
The HPC Observatory is dedicated to analyzing the social and research implications of HPC. The HPC Observatory is supported by multiple RISC2 partners.

The objective of the HPC Observatory is to serve as a relevant source of information that European and Latin American research organisations can address with HPC and/or AI issues.

<https://www.risc2-project.eu/hpc-observatory/>



HPC Observatory Resources



The screenshot shows a web browser displaying the RISC2 HPC Observatory website. The page has a green header with the RISC2 logo and navigation links: ABOUT, CONSORTIUM, NEWS AND EVENTS, RESOURCES, HPC OBSERVATORY, and CONTACT. Below the header, the main heading is "Centers". A horizontal menu lists various regions: All, Latam, Mexico, Colombia, Uruguay, Costa Rica, Chile, Brazil, and Argentina. The "All" option is selected. Below this menu, there is a list of five center entries, each in a white rounded rectangle with a yellow "Read More" button. The entries are:

- Latam Mexico: Centro Internacional de Mejoramiento de Maíz y Trigo
- Latam Mexico: Centro de Negocios en Ciudad Tres Marías
- Latam Mexico: Centro de datos Bioturbosina y Biocombustibles Sólidos
- Latam Mexico: Centro de Innovación Digital "Mandra"
- Latam Mexico: GRID Morelense de Alto Rendimiento

- **Repository:** Collection of the reports and training materials produced during the RISC2project lifecycle. The files will be available for download.
- **Centers:** List of relevant HPC research and industrial organisations in LATAM.
- **News and Events:** News, information on past and upcoming events, collaboration opportunities, and relevant reports.



HPC Observatory Impact



High Performance Computing (HPC) Observatory is a powerful tool to identify centers, laboratories, capabilities in the HPC Ecosystem (Knowledge, Infrastructure, Partnership and social/economic relevance).

The HPC observatory is an important tool not only for monitoring but also for supporting decision-making regarding policies and future actions that involve sustainability in projects.

SCALAC/RedCLARA will take over from the HPC observatory provided by RISC2.

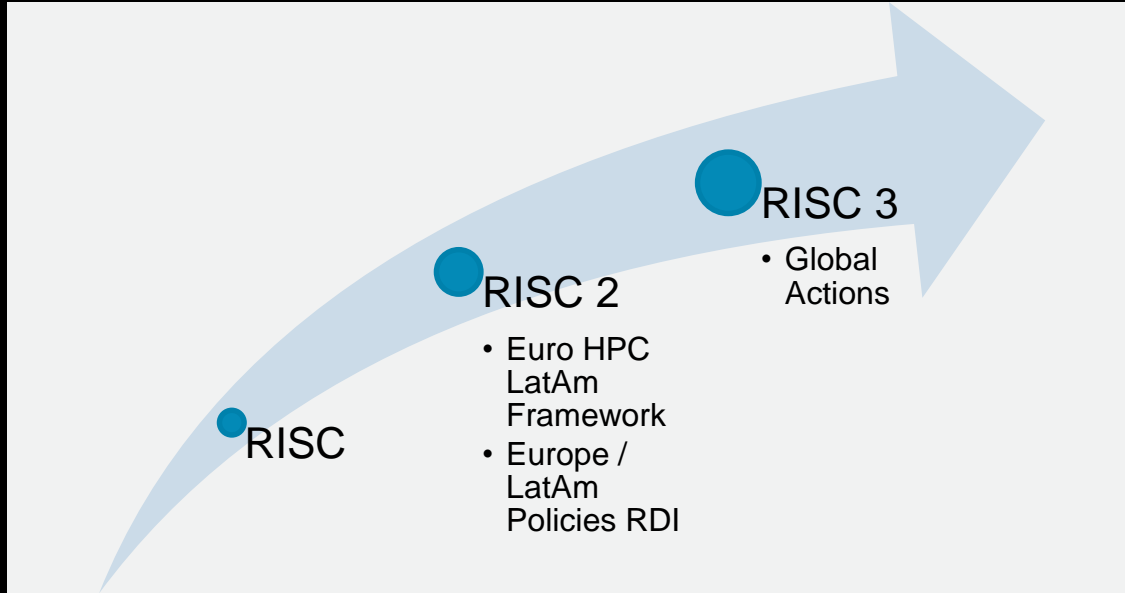


RISC2 ROADMAP

RISC2 promotes exchanging best practices through different activities.

The roadmap identifies key HPC-related technology areas in Latin America and explores the commonalities and synergies between them and their European counterparts.

The road mapping task within RISC2 aims to identify the key technology areas that are current research priorities, are in use in the industry, or are emerging in HPC centers and have a relevant impact on R & D collaboration opportunities.



	January	February	March	April	May	June	July	August	September	October	November	December
2021		First project meeting (11.02)				Technical Board meeting (03.06)			Technical Board meeting (07.09)	[Awareness] CARLA Workshop (05.10) Technical Board meeting (13.10)	Technical Board meeting (02.11)	Technical Board meeting (07.12)
2022		Technical Board meeting (01.02)	Technical Board meeting (05.03)	Technical Board meeting (05.04)	Technical Board meeting (12.05)	Technical Board Meeting (07.06) [Training] HPC + AI (online) (22-23.6)	Technical board review rehearsal (05.07) Project Review Meeting (11.07) [Awareness] MUS 2022 (Porto) (07-08.07)	[Training] CRIPC (Costa Rica) (08-10.08) [Training] Webinar1 (24.08) [Training] 2022 ACM Europe Summer School (Barcelona) (29.08-02.09)	[Awareness] REE Cluster 2022 (Heidelberg) (06.09) [Training] Webinar2 (22.09) [Awareness] CARLA 2022 (Porto Alegre) (26.09)	Technical Board meeting (04.10) [Training] HPC Administrators School for HPC (Chile) (17-20.10) [Training] Webinar3 (19.10)	Technical Board meeting (08.11)	[Training] Seminario (Montevideo) (31.10 - 20.12) [Training] Webinar #4 (07.12)
2023	Technical Board meeting (17.01) [Training] CRIPC (Costa Rica) (01.01 - 03.02)	Technical Board meeting (15.02) [Training] Webinar #5 (22.02)	Technical Board meeting (07.03) [Training] HPC school (Buenos Aires) (13-17.03) [Training] Webinar #6 (15.03)	Technical Board meeting (11.04)	Technical Board meeting (03.05) [Awareness] II Cumbre Académica y del Cooperativismo ISI LAC (Santiago de Compostela) (4-5.05) [Training] SCCAMP (Cartagena de Indias) (14-20.05)	Technical Board meeting (03.06)	[Training] 2023 ACM Europe Summer School (Barcelona) (14.7-07) RISC2 all-hands meeting (Brussels) (18.07) [Awareness] Polymaters event (Brussels) (18.07)		[Awareness] CARLA 2023 (Cartagena de Indias) (18-22.09.2023)	Final Project review		

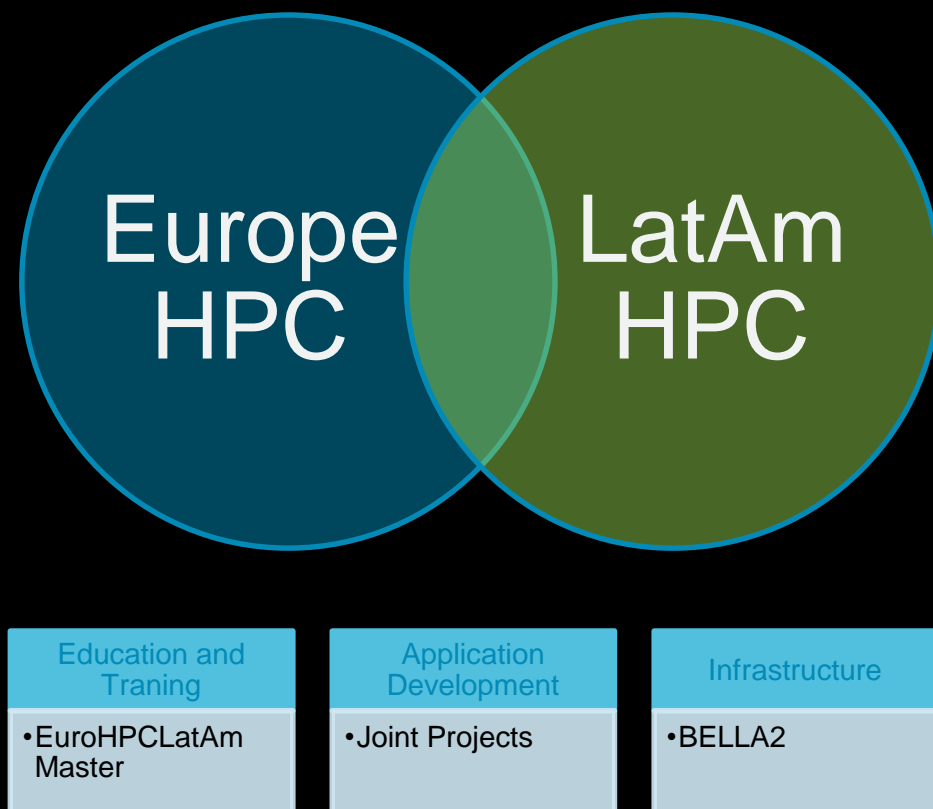
RISC2 Roadmap Achievements

Research area	AR	BR	CL	CO	CR	MX	UY	EU
HPC + Data Science + Scientific computing		X		X				X
HPC Training (Joint HPCMasters)				X				X
Unified computing infrastructure for HPC and AI	X	X			X			X
Material Science (large data repositories)		X						X
Bioinformatics & Earth observation			X	X	X			X
Astronomy & Earth observation			X					X
Energy transition & smart cities				X		X	X	X
Water management				X				X
Oceans monitoring	X			X				X
Digital humanities (migrations)				X				X

- Identification of common areas to foster collaboration.
- Establish a priority for the HPC research areas per country, which should be mapped with policy documents, action plans, and calls.
- Recommendation of the creation of Centres of Excellence in Latin America to enhance the research and innovation in these essential application domains.
- Recommendations to policymakers to dedicate efforts to supporting the development of real HPC impact.
- RISC2 recommends the strengthening of SCALAC/RedCLARA and the EuroHPCLatam relationship.



RISC2 Joint Actions Plans



RISC2 promotes International collaboration in HPC to build international research partnerships and promote scientific diplomacy.

These partnerships can promote the exchange of knowledge, skills, and resources, leading to the development of new technologies and innovative solutions to global challenges following joint actions plans to growth a sustainable advanced computing ecosystem.

RISC2 : Europe and LatAm Joint Actions Plans

HPC + Data Science + Scientific Computing
HPC training (Joint HPCMasters)
Unified computing infrastructure for HPC and AI
Material Science (large data repositories)
Bioinformatics & Health
Astronomy & Earth observation
Energy transition & smart cities
Water management
Oceans monitoring
Digital humanities (migrations)

- 10 strategic areas of joint action were identified.
- All areas are related to country priorities and global sustainable development goals.
- Joint actions Europe Latin America are integrated with global actions (with other regions: Asia, Oceania, North America)



RISC2 WP2 Final Notes



The results of the RISC2 support the exchange of the best practices in HPC, among Europe and Latin America.

RISC2 boosting and promotes the interaction between researchers and policymakers in both regions and strengthens their connection towards the definition of a coordinated policy and a concrete roadmap for the future.

Today RISC2 realizes a real Europe HPC Latin America joint action, contributing to strengthening the HPC ecosystem and its global relevance.



Acknowledgements

RISC2 and External Partners Documents Contributors

Amalia Hafner, Fabrizio Gagliardi, Antônio Tadeu Azevedo Gomes, Ginés Guerrero, Esteban Meneses, Isidoro Gitler, Sergio Nesmachnow, Paula Rodrigues, Elena Markocic, Manuel Fiolhais, Carla Osthoff, Kary Ocaña, Frédéric Valentin, Alvaro Coutinho, Marta Mattoso, Patrick Valduriez, Francielli Zanon Boito, Johantan Pecero, Pascal Bouvary, Luis Eliecer Cadenas, Phillippe Navaux, Rafael Mayo Garcia, Marta Serrano, Gonzalo Merino, Hernán Asorey, Luis Alberto Nunez de Villavicencio Martinez, Dario Yezid Peña, Jorge Luis Chacón Velasco, Javier Montoya, Harold Castro, Alejandro Maas, Ana Maria Loaiza, Jose Tiberio Hernández and Salma Jaliffe.



Thanks – Gracias - Obrigado

