



INTERNATIONAL ALLIANCE OF  
RESEARCH UNIVERSITIES

## **Session 11: AOB**

## Session 11: Proposal from ETH Zürich - Participation of IARU Teams in CYBATHLON 2024

*For discussion and decision by Senior Officers. ETH Zürich are requesting \$17,000 from IARU funds to support this project.*

### Context

CYBATHLON, an initiative of ETH Zurich, is a platform that challenges teams from all over the world to develop assistive technologies suitable for everyday use by and with people with disabilities. The driving force behind CYBATHLON is international competitions and events, in which teams consisting of technology developers from universities (~70%), companies (~20%), NGOs or others (~10%) and a person with disabilities tackle various everyday tasks with their latest assistive technologies. The participants with physical disabilities show how to tie shoelaces with a robotic arm prosthesis, balance on rocks with a prosthetic leg or overcome uneven terrain with an exoskeleton.

The next CYBATHLON Edition, i.e., the main competition in the current period 2021–2024, will take place in Zurich and around the world from 25 to 27 October 2024. The CYBATHLON competition includes eight disciplines: Arm Prosthesis Race (ARM), Leg Prosthesis Race (LEG), Ex-oskeleton Race (EXO), Wheelchair Race (WHL), Brain-Computer Interface Race (BCI), Functional Electrical Simulation Bike Race (FES), Assistance Robot Race (ROB), Vision Assistance Race (VIS).

Through CYBATHLON, ETH Zurich demonstrates together with the participating teams what research and development mean for society. Since the idea was born in 2013, more than 100 teams from over 30 countries have taken part in CYBATHLON competitions since 2015. Observed and cheered on by thousands of spectators in the stadium and around the world, in recent years the development teams have shown which obstacles people with disabilities face in their everyday lives and how technology can contribute to overcoming these barriers. As a platform, CYBATHLON connects society, research and development and people with disabilities in an emotional, positive, and unique way.

For CYBATHLON 2024, the following teams have registered from IARU member universities to date (registration is open until 31 March 2024):

- ROB: ETH Zurich
- VIS: ETH Zurich with ZHAW & UZH, VIS

The following teams from IARU member universities have registered for past CYBATHLON events and are potential teams to participate in CYBATHLON 2024 again:

- LEG: Peking University
- LEG: BionicM Inc. (Research started at University of Tokyo)
- LEG: ETH Zurich
- BCI: ETH Zurich with Nanyang Technological University Singapore
- WHL: Scewo (ETH Zurich spin-off)

### Application

Teams participating at the CYBATHLON 2024 need to pay a registration fee of CHF 3'000 (~US\$ 3'400). The fee covers a minor part of the services provided by the organisers (such as technical check of the devices, medical check of participating persons with disabilities, hosting, shuttle service). Registered teams from universities can apply for travel funding or infrastructure that is distributed by CYBATHLON to support financially weaker teams.

ETH Zurich cordially invites teams from IARU partner universities to participate in CYBATHLON 2024. Although the registration fee is only a small fraction of the costs for a team's participation, a fee waiver can help teams to get engaged.

In view of this incentive effect, ETH Zurich applies for IARU funding to cover the registration fee of one team each from five IARU member universities, i.e., for CHF 15'000 (~ \$ 17'000). If more than five teams would register, funding would be distributed on a first-come, first-served basis.

### **Next steps**

CYBATHLON, ETH Zurich will prepare information material for teams of IARU member universities to be distributed potential laboratories and research groups that could potentially form a team. The CYBATHLON office will provide a list of groups identified for potential participation.

### **Video clips**

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|-----------------------------|---|
| This is CYBATHLON           | <a href="https://youtu.be/c1kcDykQHCE">https://youtu.be/c1kcDykQHCE</a> |
| Inside CYBATHLON 2016       | <a href="https://youtu.be/miI6pWb3jkc">https://youtu.be/miI6pWb3jkc</a> |
| CYBATHLON 2020 on BBC Click | <a href="https://youtu.be/WnnkWUn6UdY">https://youtu.be/WnnkWUn6UdY</a> |
| CYBATHLON 2024 Announcement | <a href="https://youtu.be/WwXPCI1apZk">https://youtu.be/WwXPCI1apZk</a> |