## FroCoS/ITP/TABLEAUX 2025 to Reykjavik

This is a bid to host FroCoS/ITP/TABLEAUX 2025 in Reykjavik, Iceland, in late October 2025.

Bid website https://icetcs.github.io/frocos-itp-tableaux25-bid/

**Host organization** ICE-TCS lab<sup>1</sup>, Dept. of Computer Science, Reykjavik University (RU).

Main organizer Tarmo Uustalu, tarmo@ru.is, full professor in ICE-TCS.

**Other members of the organizing team** Tarmo's group: currently consisting of Calvin Lee, MSc student (from autumn 2024 PhD student), Dylan McDermott, postdoc, Yasuaki Morita, PhD student.

Other logic-adjacent faculty in the lab: Luca Aceto, full professor, Antonis Achilleos, assistant professor, Anna Ingólfsdóttir, full professor, Henning Úlfarsson, associate professor and department head.

Other logic-adjacent postdocs and students in the lab: Aggeliki Chalki, postdoc, Vasiliki Kyriakou, PhD student, Stian Lybech, PhD student, Jana Wagemaker, postdoc, Jasmine Xuereb, PhD student.

Collaborators from the Dept. of Mathematics, University of Iceland (UI): Anders Claesson, full professor, Dagur Ásgeirsson, PhD student at U. of Copenhagen (expected to start a postdoc at UI in 2025).

**Venue** Reykjavik University (main option) or University of Iceland or some conference venue in the city (less preferred).

**Dates** End of Oct. 2025, e.g., Sat 18–Thu 23 Oct. or Sat 25–Thu 30 Oct. Alternatively, Tue 21–Sun 26 Oct.

**Conference structure** Similar to FroCoS-ITP-TABLEAUX 2017 in Brasília, Brazil. Workshops Sat–Sun(–Mon), ITP Mon–Thu, FroCoS/TABLEAUX Tue-Thu.

Alternatively, workshops Tue–Wed(–Thu), ITP Thu–Sun, FroCoS/TABLEAUX Fri–Sun.

**Approximate fee structure** Early fee individual conferences (3 or 4 days) 500..600 EUR, early fee workshop(s) only (1 or 2 days) 150..200 EUR, early fee all-inclusive 600..700 EUR. This includes lunches and coffee breaks and also the social event. A bit cheaper for students.

Late fees significantly more expensive.

Any excursions will have to be paid separately, around 80 EUR for a full day.

<sup>&</sup>lt;sup>1</sup>The university suffered a major cyberattack in early February. We are in the process of recovering and rebuilding our lab, events and personal homepages.

About Reykjavik and Reykjavik University Reykjavik, the capital of Iceland, is located in South-Western Iceland, by the ocean (the Faxaflói bay). It was the location of the first permanent settlement in Iceland. Reykjavik and its surrounding towns Hafnarfjörður, Garðabær, Kópavogur, Mosfellsbær and two smaller ones form the Capital Region of Iceland. Altogether 250,000 of the total population of 400,000 of Iceland live here. Some iconic buildings of Reykjavik are the Hallgrímskirkja church, the Harpa concert hall and the Perlan natural history museum. The Esja mountain range towers over the region in the North and is visible from almost everywhere in the town. The areas on the Reykjanes peninsula of the 2021–2023 Fagradalsfjall and 2023–2024 Sundhnúkur volcanic eruptions are close by in the South-West (only 30–35 kms from Reykjavik as the crow flies).

There are two bigger universities in Reykjavik: University of Iceland (UI) and Reykjavik University (RU). UI is older, quite universal and bigger ( $\sim$ 14000 students), RU is younger, specializing in particular areas and smaller ( $\sim$ 3500 students). Both are located close to the downtown, at different ends of the runways of the domestic airport. UI has a sizeable campus, consisting of many buildings. RU is housed in one large building by the sea. Computer science is bigger at RU than at UI. In addition to UI and RU, Reykjavik is also home to the Iceland University of Arts.

ICE-TCS is the theoretical computer science lab of RU. We do logic, concurrency theory, programming language semantics, type theory, combinatorics, algorithms and complexity.

Why Reykjavik in 2025? Considerations Iceland is an attractive tourist destination for its nature (hot springs, volcanoes etc). For its size, Reykjavik as a city has also quite a bit to offer culturally.

Reykjavik is well connected and not particularly expensive to reach from Europe and North America (but painful from Asia and South America). Keflavik International Airport (KEF) is about 50 kms from Reykjavik, transfer buses cover this distance in about 45 mins and run throughout the night, so no arrival or departure hour is problematic.

A major disadvantage of Reykjavik is the cost of accommodation. The prices can be very high due to shortage of accommodation space against the enormous number of tourists. To alleviate this, we propose to hold the conference in the 2nd half of October, outside the peak tourist season, which is from mid-May to mid-September.

Weather in Iceland is very variable and not predictable at all, but October is generally a great time to visit. The weather can be great (or not), but in general it is not worse than in summer. The days are still very long (the day of 20 Oct. 2025 from the sunrise to the sunset is from 08:35 to 17:49, with civil twilight included from 07:44 to 18:38) and the place is much less crowded than in summer.

We are particularly interested in holding FroCoS/ITP/TABLEAUX in Reykjavik specifically in 2025 since we have just won a two-year project Iceproof from the Icelandic government to promote the technology of computer-assisted proof in Iceland, in particular to introduce it into the teaching of CS and math at Reykjavik University and the University of Iceland. We have earmarked funds in the project to fully cover the expenses of some number of invited speakers (5 or so) of a conference like this.

If we can host the conference in the RU building, which we assume (shortage of space is the only concern here), we will not have to pay for the conference rooms. (The weekend is certainly no problem. During the week, we need three-way parallelism, which is we hope we can negotiate.) For catering, we expect to get a good deal from the company running the canteen at the university. Access to the university is good: the university building is only 5 bus stops (about <10 mins) from Hlemmur, the main bus hub in the city center. By foot, it is a 30..40

mins walk from hotels and guesthouses in the city center (postal code 101). And just behind the university building there is a geothermally heated beach, open all year round.

Track record of the organizers as hosts The ICE-TCS lab has organized a number of (T)CS events in Reykjavik. Luca Aceto with colleagues organized ICALP 2008, Discotec 2011, LICS 2017, NWPT 2006, 2016. Antonis Achilleos and Tarmo Uustalu organized Logic Colloquium 2022 and NWPT 2021. Antonis is currently organizing Scandinavian Logic Symp. and Nordic Logic Summer School (NLS) 2024. With the exception of NWPT 2006 and ICALP 2008, all of these events were held at the new RU building, opened in 2010.

Tarmo has also organized many events in Estonia, in particular, APPSEM 2004, GPCE/ICFP/TFP 2005 in Tallinn, MPC/AMAST 2006 in Kuressaare, ETAPS 2012, TYPES 2015, NWPT 2008, 2013, 2019 in Tallinn. For 25 years, he has contributed to the organization of the Estonian Winter Schools in Computer Science, EWSCS; he was the main organizer of 20 of these schools at Palmse and Viinistu 2002–2024.