ETAPS DAILY

A tour of historical Grenoble

Time Table

9^{00}-10^{00}: FOSSACS invited talk
10^{00}-10^{30}: coffee break
10^{30}-12^{30}: parallel sessions
12^{30}-14^{00}: lunch
14^{00}-16^{00}: parallel sessions
16^{00}-16^{30}: coffee break
16^{30}-18^{00}: parallel sessions

Scientific Events

FOSSACS invited talk : Petr Jancar (Technical Univ of Ostrava, Czech Republic)
FASE (Kilimandjaro),
FOSSACS, (Makalu),
TACAS (Amphitheater)

Take some time to create your own itinerary for a pleasant walk through the city. Let charming places open their doors to you. Here are some recommendations.

The surrounding Gallo-Roman wall, beginning of rue Lafayette. Ruins of the first wall that surrounded the city, built between 286 and 293 A.D., the wall **included** 39 towers when the emperor Diocletian promoted Cularo to administrative capital.

Place Grenette. Main square since the 17th century, it used to host grain and animal markets.Don't miss the beautiful stone fountain, with its winged cherubs astride dolphins, sculpted by Victor Sappey.

Former 3 Dauphins tavern. Napoleon spent two nights on the first floor here in March 1815. At the time, a certain Labarre, veteran of the campaign in Egypt, owned and operated the tavern.

Rue Jean-Jacques Rousseau. On January 23, 1783, at 14, rue Jean Jacques Rousseau, the famous romantic author Stendhal was born. Don't miss the beautiful walnut-wood doors from the end of the 17th century and just opposite, the Renaissance-period tower of the Hotel Rabot.

Rue and Porte de Bonne. Here once stood the former Bonne gateway, built around 1670, which served as the main entrance into the city on the south side. Napoleon entered Grenoble through this gateway the night of March 7, 1815 at the beginning of the hundred days.

UNIVERSITE JOSEPH FOURIER
SCIENCES TECHNOLOGIE MEDECINE

GRENOBLE 1

Weather Forecast

	AM	PM	Evening
Friday	☀️	☀️	🌙
Saturday	🌤️	☀️	🌙
Sunday	☀️	☀️	🌙

FOSSACS Invited Talk (Petr Jancar, Tech Univ of Ostrava, Czech Republic) (Equivalences of Pushdown Systems are Hard)

Abstract: The talk aims to re-attract the research attention to the so far unclarified complexities of some fundamental equivalence problems. Language equivalence of deterministic pushdown automata (DPDA) was shown to be decidable by Sénizergues who got the Gödel Prize in 2002 for this achievement. He also generalized the proof to show decidability of bisimulation equivalence of (nondeterministic) PDA with restricted epsilon-rules. Stirling showed that the DPDA equivalence is primitive recursive but no upper bound for the more general problem is known. Regarding the lower bounds, only P-hardness is known in the case of DPDA while the general problem for PDA is nonelementary, as shown by Benedikt, Göller, Kiefer, and Murawski even for PDA with no epsilon-rules. One main goal of the talk is to sketch the main ideas behind Stirling's approach in a non-technical way, in the framework of standard first-order terms (depicted as trees), which also allows to see that DPDA equivalence is, in fact, in TOWER, i.e. in the ``least'' nonelementary complexity class. Another main goal is to show why bisimulation equivalence on PDA with restricted epsilon-moves is even Ackermann-hard, and thus not primitive recursive.

The Organizing Committee

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Best Paper Awards at ETAPS

Several papers are awarded this year by EATCS, EASST, and EAPLS. The awarded papers are below. Congratulations to the awardees!

EATCS:

- Christel Baier, Joachim Klein, Sascha Klueppelholz and Steffen Märcker. *Computing Conditional Probabilities in Markovian Models Efficiently*, TACAS.
- Naoki Kobayashi, Kazuhiro Inaba and Takeshi Tsukada. *Unsafe Order-2 Tree Languages are Context-Sensitive*, FoSSaCS

EASST:

- Christian Von Essen and Dimitra Giannakopoulou. *Analyzing the Next Generation Airborne Collision Avoidance System*, TACAS

EAPLS:

- Justin Slepak, Olin Shivers and Panagiotis Manolios. *An Array-Oriented Language with Static Rank Polymorphism*, ESOP.

Next Year, ETAPS 2015 will be in London

The eighteenth conference, ETAPS 2015, will take place between April 11th and 19th, 2015 at Queen Mary University of London, in London, United Kingdom.

London is one of the most visited and cosmopolitan cities on earth. It is a leading global city, with strengths in science, research and development, finance, arts, commerce, entertainment, fashion, healthcare, media, professional services, tourism and transport all contributing to its prominence. It is easily reachable from anywhere in the world and an ideal city to host ETAPS.