The first day of the main ETAPS conferences will be opened by Joost-Pieter Katoen followed by the first plenary speaker Frank Pfenning.

Title: Polarized Substructural Session Types

Abstract: The deep connection between (intuitionistic) linear logic and session-typed message-passing concurrency gives rise to some expressive high-level concurrent programming constructs. We illustrate these through a running example and point out some practical benefits as well as drawbacks of the exacting nature of linear types.

We show how to overcome some of the disadvantages by employing Benton's adjoint construction to combine linear, affine, and shared channels in a uniform way.

Next, we resolve the usual dichotomy between synchronous and asynchronous message passing by polarizing the type system (in the
sense of Girard and Laurent), giving the programmer the means to explicitly specify synchronization in their types.

Surprisingly, these two apparently orthogonal generalizations of the purely linear starting point turn out to be very closely related. We arrive at a uniform type system that incorporates structural and directional aspects of communication channels.

[Joint work with Dennis Griffith, University of Illinois at Urbana-Champaign]

---

**Reception on the Dixie Queen**

The Dixie Queen is London’s largest entertainment, conference and party boat. Holding up to 520 guests, the boat is a multi-million conversion into a luxurious replica of a 19th century Mississippi Paddleboat.

For the ETAPS reception the boat will embark from 1915 and leave at 1930 sharp from Tower Pier (tube station Tower Hill, walking map from Tower Hill on the right). Please be early as the boat will have to leave on time. Don’t worry of arriving too early as the river views near Tower Pier are quite spectacular. The cruise will start with Tower Bridge opening for us and we will then head eastwards towards London docklands and Greenwich.

After a welcome drink, a buffet dinner will be served. Free drinks will be provided at the bar.

The reception will end at 1030 with the Dixie Queen disembarking at Tower Pier. There will be an intermediate stop at 2100 for people who wish to leave early. The stop will be at Canary Wharf (Jubilee line tube station and DLR).