**Nice, 2-4 October 2024** 

# CCC 2024

## **PROGRAM**

(joint with Journées Calculabilités)

#### **General information**

#### About talks length

**Invited:** 50 minutes plus 10 minutes for questions **Regular:** 35 minutes plus 10 minutes for questions

#### **About lunch**

If weather is good, lunch is a buffet served right outside the conference building. In case of rainy weather, the lunch will be served right outside the conference hall. If you have any dietary restriction, please ask the waiter or the organizers for informations.

#### **About conference dinner**

The conference dinner will be on Thursday 3 October at 20 o'clock. Bring your conference badge with you. The gathering point at the tramway stop 'Valrose Université' at 19:40.

### Talks schedule

	Wednesday, 2 October 2024
09:30 10:00	Registration to CCC 2024
10:00 10:15	CCC 2024 opening
10:15 11:00	Kenza Benjelloun (Journées Calculabités) Infinite time Turing machines for elementary proofs on recursive reals
11:00 11:30	Coffee break
11:30 12:30	Micaela Mayero (Invited speaker)  An overview of the real numbers in theorem provers: an application with real analysis in Coq
12:30 14:00	Lunch
14:00 14:45	Martin Baillon, Yannick Forster, Assia Mahboubi, Pierre-Marie Pédrot and Matthieu Piquerez  A zoo of continuity properties in constructive type theory
14:45 15:30	Haoyi Zeng, Yannick Forster, Dominik Kirst and Takako Nemoto Post's Problem in Constructive Mathematics
15:30 16:15	Riccardo Gozzi and Olivier Bournez Set Descriptive Complexity of Solvable Functions
16:15 17:00	Guided tour of Valrose Park

	Thursday, 3 October 2024
09:00 09:30	Registration to CCC 2024
09:30 10:30	Svetlana Selivanova (Invited speaker)  Theory and practice of solving differential equations in exact real computation
10:30 11:00	Coffee break
11:00 11:45	Jaden Jorradol, Alexander Stoimenov and Martin Ziegler iRRAM for 6191 Knots: Implementing the Burau Spectral Test in Exact Real Computation
11:45 12:30	Manon Blanc and Olivier Bournez  Characterisations of polynomial-time and -space complexity classes over the reals
12:30 14:00	Lunch
14:00 14:45	Ulrich Berge Program extraction in Church's Simple Theory of Types
14:45 15:30	Hiromi Hasegawa, Katsunobu Imai and Hideki Tsuiki A Hexagonal Cellular Automaton with Alternating Update
15:30 16:00	Coffee break
16:00 16:45	Henri Lombardi and Assia Mahboubi  Geometric theories for real number algebra without sign test or dependent choice axiom
16:45 17:30	Olivier Bournez, Johanne Cohen and Valentin Dardilhac  Complexity of solving inequation systems with piecewise affine approximable functions - to be confirmed

	Friday, 4 October 2024
09:30 10:15	Mathieu Sablik (Journées Calculabilités)  Computability of the asymptotic behaviour of topological dynamical systems
10:15 11:00	Gabriel Istrate On the Inference of (Mostly Unimodal) Dynamical Systems from Queries
11:00 11:30	Coffee break
11:30 12:30	Joris Tillet, Julien Alexandre Dit Sandretto and Elena Vanneaux <b>Guaranteed Satisfaction of a Temporal Logic Formula with a Confidence Parameter</b>
12:30 14:00	Lunch & Closing