The Futures of Reactive Synthesis

Monday

9:00–10:30  **Introduction**
9:00 - 9:30  Everyone  
*Short introduction (30 sec, no slides)*
9:30 - 10:00  Bernd Finkbeiner  
*A primer on reactive synthesis*
10:00 - 10:30  Guillermo A. Perez  
*A primer on SYNTCOMP*

10:30–11:00  Coffee break
11:00–12:00  Open Problem Session
12:15–14:00  Lunch

14:00–15:30  **Symbolic Algorithms for Synthesis**
14:00 - 15:00  Anne-Kathrin Schmuck  
*Invited talk: Reactive Synthesis for Feedback Control*
15:00 - 15:30  Q & A

15:30–16:00  Coffee break

16:00–17:30  **Working Session 1**
16:00 - 17:30  Guillermo A. Perez  
*Graph neural networks and reactive synthesis*
16:00 - 17:30  Shaull Almagor  
*Specification formalisms for synthesis of quantitative models*
16:00 - 17:30  Pierre Ohlmann  
*Positionality and memory in games*
16:00 - 17:30  Nathanaël Fijalkow  
*Programmatic reactive synthesis*

18:00–20:00  Dinner
Tuesday

9:00–10:30  CONSTRAINT-BASED SYNTHESIS

9:00 - 10:00  Armando Solar-Lezama
   Invited talk

10:00 - 10:30  Q & A

10:30–11:00  Coffee break

11:00–12:00  CONTRIBUTED TALKS 1

11:00 - 11:20  Rüdiger Ehlers
   Fixpoint Equations for Synthesis – Towards a Renewed Interest

11:20 - 11:40  Frederik Schmitt
   Deep Learning for Reactive Synthesis

11:40 - 12:00  Niklas Metzger
   Compositional Synthesis with Hyperproperties

12:15–14:00  Lunch

14:00–15:30  WORKING SESSION 2

14:00 - 15:30  Bernd Finkbeiner, Frederik Schmitt
   Deep learning for reactive synthesis

14:00 - 15:30  Rüdiger Ehlers, Tom van Dijk
   Symbolic synthesis with BDDs and beyond

14:00 - 15:30  Shufang Zhu
   Synthesis for LTL on finite traces

15:30–16:00  Coffee break

16:00–17:00  SUMMARY OF FIRST TWO DAYS

18:00–20:00  Dinner
Wednesday

9:00–10:30  SyGuS
   9:00 - 10:00  Ruzica Piskac  
      Invited talk
   10:00 - 10:30  Q & A

10:30–11:00  Coffee break

11:00–12:00  Contributed talks 2
   11:00 - 11:20  Mark Santolucito  
      Reactive Synthesis as a Programming Language Paradigm
   11:20 - 11:40  Hazem Torfah  
      Synthesizing pareto-optimal interpretations for black-box models
   11:40 - 12:00  Loris D’Antoni  
      Synthesizing Specifications

12:15–14:00  Lunch

14:00–17:00  Hike

18:00–20:00  Dinner
Thursday

9:00–10:30  \(\omega\)-Automata Learning

9:00 - 10:00  Dana Fisman
Invited talk

10:00 - 10:30  Q & A

10:30–11:00  Coffee break

11:00–12:00  Contributed Talks 3

11:00 - 11:20  Emmanuel Filiot
Synthesis from LTL specifications and examples

11:20 - 11:40  Anca Muscholl
On distributed synthesis

11:40 - 12:00  Rayna Dimitrova
Solving Infinite-State Games via Acceleration

12:15–14:00  Lunch

14:00–15:30  Working Session 3

14:00 - 15:30  Anca Muscholl
Distributed synthesis

14:00 - 15:30  Loris D’Antoni
Extracting logical specifications from code

14:00 - 15:30  Guillermo A. Perez
SYNTCOMP benchmarking

14:00 - 15:30  Cesar Sanchez
Reactive synthesis beyond the Bools

15:30–16:00  Coffee break

16:00–17:00  Summary of past two days

18:00–20:00  Dinner
Friday

9:00–10:00  Closed problem session

10:00–10:30  Coffee break

10:30–12:00  Working session 4

12:15–14:00  Lunch