ICRA'21 Workshop on Compositional Robotics: Mathematics and Tools

The goal of the workshop is to integrate **mathematical principles and practical tools for compositional robotics**, with a focus on **applied category theory** as a meta-language to talk about compositionality.

When: May 31st, from 16:15 UTC onwards. Schedule (in UTC):

16:15–16:30: Introduction and plan of the workshop

16:30–17:10: Category Theory Basics (Dr. Jonathan Lorand)

17:20–18:00: Category Theory and Systems (Prof. John Baez)

18:00–18:30: Breakout rooms for discussion

18:30–19:10: Categories for Co-Design (Dr. Andrea Censi, Gioele Zardini)

19:20–20:00: Dynamic Interaction Patterns (Dr. David Spivak)

20:00-20:30: Breakout rooms for discussion

20:30–21:15: A Categorical Perspective on Robotics (Prof. Aaron Ames)

21:30–22:15: Toward a Grounded Type Theory for Robot Task Composition (Prof. Daniel Koditschek, Dr. Paul Gustafson, Dr. Matthew Kvalheim)

22:30-00:30: Talks from open submissions

