

**Origins of Life: The Possible and the Actual**

February 1 – 5, 2021

Organized by Ricard Solé, (Universitat Pompeu Fabra) and  
Chris Kempes, (Santa Fe Institute)**AGENDA****Monday, February 1, 2021**

- 9:00 a.m. **Ricard Solé, (Universitat Pompeu Fabra)** “Origins of Living Complexity: The Possible and the Actual”
- 9:35 a.m. **Sara Walker, (Arizona State University)** “Breathing Life into the Laws of Physics”
- 10:10 a.m. **Chris Kempes, (Santa Fe Institute)** “Distinguishing Living Materials from Living Principles”
- 10:45 a.m. – 11:30 a.m. General discussion

**Tuesday, February 2, 2021**

- 9:00 a.m. **Kate Adamala, (University of Minnesota)** “The Life of LUCA”
- 9:35 a.m. **Lee Cronin, (University of Glasgow)** “The Origin of Chemical Reactions”
- 10:10 a.m. **Christian Mayer, (Universitat Duisburg Essen)** “Life = Order + Complexity. How to do Early Steps Lead Towards Life”
- 10:45 a.m. – 11:30 a.m. General discussion

**Wednesday, February 3, 2021**

- 9:00 a.m. **Lakshminarayanan Mahadevan, (Harvard University)** “Simple Aspects of Macromolecular Growth and Form: From Polymer Bundles to Prebiotic Vesicles”

- 9:35 a.m. **Juli Peretó, (University of València)** “From Protometabolism: Natural and Artificial Trajectories into the Possible”
- 10:10 a.m. **Sarah Maurer, (Central Connecticut State University)** “Simple Amphiphiles: Limitations and Advantages of Oily Aggregates in Probiotic Soups”
- 10:45 a.m. – 11:30a.m. General discussion

## Thursday, February 4, 2021

- 9:00 a.m. **Betul Kacar, (University of Arizona)** “What Do We Know About the Origins of Life’s Chemosynthetic Information Machinery?”
- 9:35 a.m. **Chris Adami (Michigan State University),** “Life Before Evolution”
- 10:10 a.m. **Joana C. Xavier (Heinrich Heine Universität Düsseldorf),** “The Metabolic Network of the Last Bacterial Common Ancestor”
- 10:45 a.m. **Artemy Kolchinsky, (Santa Fe Institute)** “Fundamental Thermodynamic Constraints and Trade-Offs in Origin of Life”
- 11:20 a.m. – 11:30a.m. General discussion

## Friday, February 5, 2021

- 9:00 a.m. Overview of the week
- 9:20 a.m. – 11:30a.m. General Discussion