



Origins Center Conference 2026

Exploring the origin and evolution of life on Earth and in the universe

Monday 18 May – Wednesday 20 May

Abdij Rolduc, Kerkrade

Day 1 – Monday

18 May

13:00

Reception with snacks

Aula minor

13:30

Opening & Introduction

Aula minor

Welcome – Sijbren Otto (University of Groningen) & Thomas Blankers (University of Amsterdam)

Origins Center State of the Art – Inge Loes ten Kate (Utrecht University)

14:00

Afternoon Session 1

Location: Aula minor | Chair: Willem Kegel

14:00 – **Biosignatures and the search for extraterrestrial life** – Inge Loes ten Kate (Utrecht University)

14:30 – **To boldly grow where no plant has grown before. How can we grow crops on Mars and how can we learn from it on Earth?** – Wieger Wamelink (Wageningen University and Research)

15:00 – **Ionic liquids as overlooked participants in prebiotic chemistry** – Iaroslav Jakubivsky (MIT)

15:15 – **Geochemical control of early Hadean climate and surface conditions** – Emeline Decocq (University of Groningen)

15:30 – **The protometabolic nature of prebiotic chemistry** – Andres de la Escosura Navazo (Universidad Autonoma de Madrid)

15:45 *Coffee break*

16:15 **Afternoon Session 2**

Location: Aula minor | Chair: Christof Mast

16:15 – **Why is minimal life so complex? On the need to integrate metabolic, ecological and evolutionary dynamics within abiogenesis** – Kepa Ruiz-Mirazo (University of the Basque Country)

16:45 – **Tarring the emergence of life** – Rowena Ball (Australian National University)

17:00 – **Energy rate density as a complexity metric: from life to cosmos and culture** – Martin van Duin (Independent Researcher)

17:15 – **Searching for principles of microbial physiology: from metabolic transitions to whole-cell control** – Bob Planqué (VU Amsterdam)

17:45 – **Large aggregates in the Formose reaction: new perspectives on reactivity and compartmentalization** – Yannick Geiger (University of Strasbourg)

18:00 *Dinner*

Grote eetzaal (large dining hall)

20:00 **Evening session**

Location: Aula minor | Chair: Annemieke Petrignani

20:00 – **Prebiotic organocatalysis – a mechanism to the emergence of life** – Oliver Trapp (Ludwig Maximilian University Munich)

20:30 – **A geological solution to the phosphate problem by magmatic enrichment** – Daniel Weller (Ludwig Maximilian University Munich)

20:45 – **Enhanced RNA formation under amine-rich local atmospheres from 2',3'-cyclic nucleotides** – Almuth Schmid (Ludwig Maximilian University Munich)

21:00

Relax at the hotel bar "De verloren zoon" (former wine cellar)

Day 2 – Tuesday

19 May

7:30

Breakfast

Grote eetzaal (large dining hall)

09:00

Morning session

Location: Aula minor | Chair: Wim van Westrenen

09:00 – **A planetary science perspective for timing the onset of life's origins on Earth** – Ramon Brassler (Konkoly Observatory, Budapest)

09:30 – **Luctor et emergo: The geological processes needed to make land on a wet planet** – Douwe van Hinsbergen (Utrecht University)

10:00 – **Exploring how biotic interactions affect cyclicity in carbonate rocks with CarboKitten.jl** – Charlotte Summers (Utrecht University)

10:15 – **Chaos: the bringer of life** – Simon Portegies Zwart (Leiden Observatory)

10:30

Coffee break

11:00

Societal Engagement Session

Location: Aula minor | Chair: Thomas Blankers

11:00 – **Moving Art** – Michel Reij

11:15 – **Communicating PRELIFE** – Marieke Baan (University of Amsterdam)

11:30 – **Stakeholder engagement workshop** – Inge Loes ten Kate (Utrecht University) & Thomas Blankers (University of Amsterdam)

12:30

Lunch

Brasserie de Kanunnik

13:30

Free time and excursions

15:00

Poster Session (with drinks)

Zaal 4 (hall 4)

16:45

Afternoon Session

Location: Aula minor | Chair: Andres de la Escosura

16:45 – **Surface astrochemistry – how complex can it be** – Herma Cuppen (Radboud University Nijmegen)

17:15 – **Formation of clay nano-compartments in origins of Life** – Orr Rose Bezaly (University of Amsterdam)

17:30 – **Enrichment and selection by physical non-equilibria to control prebiotic chemistry** – Christof Mast (Ludwig Maximilian University Munich)

17:45 – **Living Planet – how life and planet are interdependent and co-evolving: an interdisciplinary approach** – Martijn Egas (University of Groningen)

18:15

Dinner

Grote eetzaal (large dining hall)

20:00

Evening session

Location: Aula minor | Chair: Simon Portegies Zwart

20:00 – **Icy moons and their subsurface oceans: from Cassini and JWST observations to laboratory experiments** – Stephanie Cazaux (Delft University of Technology)

20:30 – **Complexity from the stars - Formation of complex organics from interstellar carbon chains** – Marten Raaphorst (Leiden Institute of Chemistry)

20:45 – **Building a synthetic protocell with resilient chemical compatibility** – Pornpawit Siricharoensang (University of Groningen)

21:00

Relax at the hotel bar "De verloren zoon" (former wine cellar)

Day 3 – Wednesday

20 May

7:30

Breakfast

Grote eetzaal (large dining hall)

09:00

Morning Session 1

Location: Aula minor | Chair: Yannick Geiger

09:00 – **Bare-rock worlds or planets with peculiar atmospheres? Predicted atmospheric evolution of rocky planets around M dwarfs** – Lena Noack (Freie Universität Berlin)

09:30 – **Chiral self-selection in the RNA world** – Sreekar Wunnava (Ludwig Maximilian University Munich)

09:45 – **Origins of cellular compartmentalization: from lipids to protocells** – Nathalie Katsonis (University of Groningen)

10:15 – **Integrating synthetic self-replicators with self-assembling coacervate compartments** – Lukas Herold (University of Groningen)

10:30

Coffee break

11:00

Morning Session 2

Location: Aula minor | Chair: Inge Loes ten Kate

11:00 – **Fidelity of RNA copying from random pools via 2', 3'- cyclic phosphate mediated ligation** – Zsofia Meggyesi (Ludwig Maximilian University Munich)

11:15 – **Evolving the molecules of life: RNA and protein** – Sam von der Dunk (University of Oxford)

11:30 – **From rule-taking to rule-making chemistry** – Celia Blanco (Centro de Astrobiologia, CSIC-INTA Madrid)

11:45 – **Astronomical climate forcing in deep time** – Margriet Lantink (Utrecht University)

12:00 – **Egalitarian transitions and the evolution of heredity** – Paul Rainey (Max Planck Institute for Evolutionary Biology, Plön)

12:30 – **Closing Remarks** – Sijbren Otto (University of Groningen) & Thomas Blankers (University of Amsterdam)

12:35

Lunch

Brasserie de Kanunnik