

Enigmas in the evolution of Life

Symposium of the research theme “*Astrobiology: Past, Present, and Future*”, Pufendorf Institute, Lund University

Friday October 21, 2011, *The Pufendorf Institute* (Sölvegatan 2 / Biskopsgatan 3, Lund)

08:30 Coffee

09:00 Welcome/Introduction

Vivi Vajda (Coordinator Theme: “The emergence of Life”, Pufendorf Institute)

09:15 **One Hundred Billion Reruns: Exoplanets and the Tape of Life**

Eric Gaidos (University of Hawai'i at Manoa, USA)

09:45 **3800 million years of biologic activity - metabolic erasure of Earth's prebiotic environments**

Minik Rosing (Copenhagen University, Denmark)

10:15 **Schrödinger organisms, genetic conflicts and the origin of life**

Bengt-Olle Bengtsson (Lund University, Sweden)

10:45 Coffee break

11:15 **Hydrothermal vents and serpentinization: Bringing rocks to life**

William Martin (University of Dusseldorf, Germany)

11:45 **Microbial evolution and biogeochemistry in the Precambrian**

Don Canfield (University of Southern Denmark)

12:15 **Macroevolution in early eukaryotes**

Emanuelle Javanx (University of Liège, Belgium)

12:45-13:45 Lunch

13:45 **Precambrian animal embryos**

Stefan Bengtson (The Swedish Museum of Natural History, Stockholm, Sweden)

14:15 **Fossils of the earlier animals and their living strategies/habitat**

Mary Droser (University of California at Riverside, USA)

14:45 Coffee break

15:15 **Meteorite impacts' effect on Life**

Vivi Vajda (Lund University, Sweden)

15:45 **How does evolution really work? Surprising genetic views from extinct species of humans and animals**

Alan Cooper (University of Adelaide, Australia)

16:15 Close by *Sture Forsén* (Pufendorf Institute chair) & *David Dunér* (Coordinator of the Pufendorf Astrobiology program)

The meeting is open to all interested without prior registration, but only up to the seating capacity of the auditorium. Since that is limited, it is advised to reserve a seat and the lunch by sending an e-mail to Vivi.Vajda@geol.lu.se (on a first-come, first-served basis, but not later than by October 18).

Background photo by *Eric Gaidos*- Silurian stromatoporoid from Gotland, Sweden