



Summer school "Living with a star: Basics in Space Life Sciences"

Since April 2009 the graduate program "SpaceLife" has been initiated for Space Life Sciences by the DLR Institute of Aerospace Medicine, Cologne, Germany in cooperation with the universities of Aachen, Bonn, Hamburg, Erlangen-Nürnberg, Kiel, Köln, Mageburg, Regensburg Stuttgart-Hohenheim and Zürich, the German Sports University Cologne, the University Clinics Frankfurt, the Free University Berlin and the Beihang University in Beijing, China.

Excellent and interdisciplinary training for doctoral students from different fields will explore the requirements for life in extreme environments, enabling a better understanding of the ecosystem Earth and the search for life on other planets in unmanned and manned missions.

Students will further learn to develop integrated concepts to solve health issues in human spaceflight and in related disease patterns on Earth.

The goal of this summer school is to give introductory lectures to this new interdisciplinary field.

More Information

www.DLR.de/me/SpaceLife



Muscle cross section (thigh)

Lectures are on:

- Particle Radiation:

Sources, Propagation in the Helio- and Magnetosphere, Interaction with Matter, Measurements; Radiation Biology

- Space Medicine:

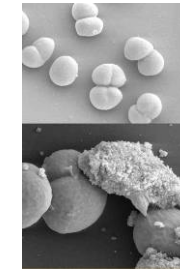
History, Space Transport Systems, Human Physiology in Space, Astronaut Training

- Astrobiology:

Search for Life, Conditions for Life, Life under Extreme Conditions

- Gravitational Biology:

Space and ground experiments, Gravisensing in cells, animals, plants



Deinococcus radiodurans

Lecture Examples

- Prof Dr. Ralf Anken (DLR, Cologne):

Animal gravity sensors:
Evolutionary trends

- Dr. Volker Damann (ESA, Cologne):

The Human Factor – from a Space-Medicine Perspective

- Prof. Dr. Bernd Heber (Christian-Albrechts-Universität Kiel):

Sources of Energetic Particles in the Heliosphere (the Interplanetary Radiation Field)

- Dr. Gerda Horneck (DLR, Cologne):

Steps to Life

- Dr. Harald Huber (University of Regensburg):

Life under Extreme Conditions

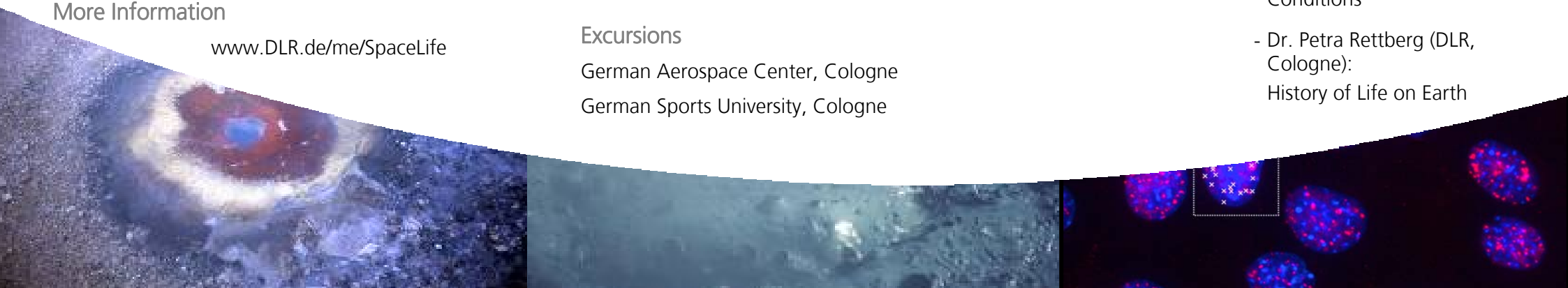
- Dr. Petra Rettberg (DLR, Cologne):

History of Life on Earth

Excursions

German Aerospace Center, Cologne

German Sports University, Cologne





Summer School

Costs

before June 15th, 2009

320 € (Students), 340 € (University & Non-profit research institutions)

after June 15th, 2009

370 € (Students), 400 € (University & Non-profit research institutions)

including

- lodging at the Physikzentrum
- breakfast, lunch, dinner
from August 23 to 28, 2009
- Guided Tour at SeaLife Königswinter

Location

Physikzentrum Bad Honnef
Hauptstr. 5
D-53604 Bad Honnef
Germany
www.pbh.de

Registration

Please download the registration form at www.DLR.de/me/SpaceLife and send the filled form to christine.hellweg@dlr.de.

Deadline June 30, 2009

Summer School Organizers



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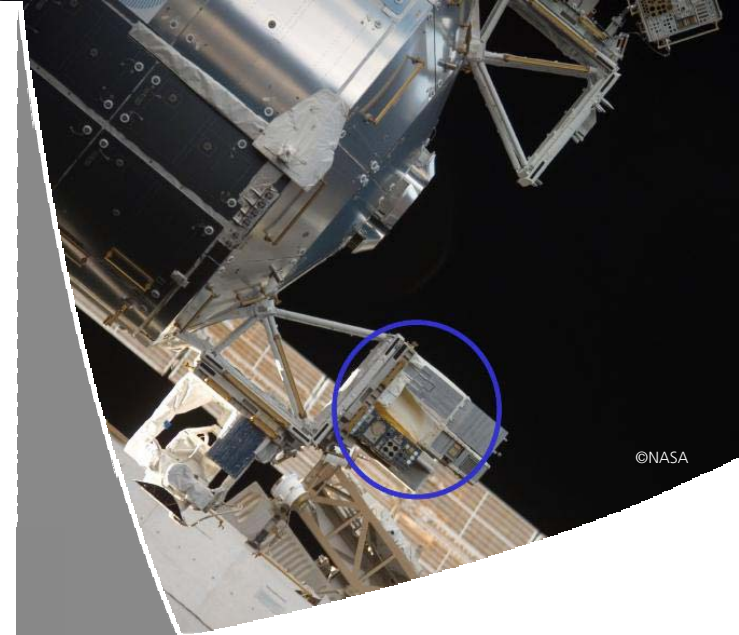


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Summer School
Physikzentrum
Bad Honnef, Germany

August 23-28, 2009



Christian-Albrechts-Universität zu Kiel

