

EANA2017

Programme

Sunday 13th.08.2017

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| 9.00 - 22.00 | AbGradE- symposium |
| 13.00 – 18.00 | EANA board meeting |
| 14.00 – 17.00 | Registration |
| 19.00 - 21.00 | Public lecture (in Danish) |

Monday 14th.08.2017

Exoplanets and solar system bodies

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| 8.00 - 9.00 | Registration |
| 9.00 - 9.20 | Welcome |
| 9.20 - 10.00 | Keynote - H. Kjeldsen: <i>Fantastic exoplanets and how to find them</i> |
| 10.00 - 10.30 | Coffee break (registration) |
| Session chair | Carolina von Essen |
| 10.30 - 10.50 | K.G. Kislyakova: <i>Induction heating of planetary interiors</i> |
| 10.50 - 11.10 | L. Noack: <i>Volcanism and outgassing of stagnant-lid planets: Implications for the habitable zone</i> |
| 11.10 - 11.30 | N. Georgakarakos: <i>Are giant planets good neighbours for habitable worlds?</i> |
| 11.30 - 11.50 | P. E. Laine: <i>White Dwarfs and Icy Worlds - Evolving Habitability</i> |
| 11.50 - 12.10 | M. Ishizuka: <i>IRD - InfraRed Doppler instrument for the Subaru telescope</i> |

12.10-13.40	Lunch break (registration)
Session chair	Helmut Lammer
13.40 - 14.00	G. Cataldi: <i>Searching for biosignatures in exoplanetary impact ejecta</i>
14.00 - 14.20	E. Szuszkiewicz: <i>Second-order mean-motion resonances in a system of two low-mass planets</i>
14.20 - 14.40	T. Šantl-Temkiv: <i>Biological ice nucleation in clouds as a novel atmospheric biosignature</i>
14.40 - 15.00	C. von Essen: <i>Current challenges to find life in other planets</i>
15.00 - 15.20	Coffee break
15.20 - 15.40	C. Gros: <i>Are most habitable planets oxygen worlds? The prospects for indigenous and terrestrial life around M dwarfs</i>
15.40 - 16.00	Ł. Kaczmarek: <i>Can tardigrades theoretically survive on Mars or on some of the recently discovered exoplanets?</i>
16.00-17.00	Poster session
18.00 - 19.00	Ice breaker (Town Hall)

Tuesday
15th.08.2017

**Exoplanets and
solar system
bodies**

9.00 - 9.10 Announcements

Session chair **Petra Rettberg**

9.10 - 9.30 K.M. Kinch: *Geologic reconnaissance for sample collection on Mars using the Mastcam-Z on NASA's 2020 Mars rover mission*

9.30 - 9.50 M. B. Madsen: *VISIR References for SuperCam Calibration Target for NASAs Mars 2020 Rover*

9.50 - 10.10	Coffee break
10.10 - 10.30	H. Lammer: <i>Origin and evolution of Earth's N₂-dominated atmosphere in contrast to Venus and Mars</i>
10.30 - 10.50	D. Nna-Mvondo: <i>Investigating on the formation processes, optical properties and chemistry of Titan's stratospheric ice clouds</i>
10.50 - 11.10	E. Profitis: <i>Automatic rock identification in macroscopic scale using image processing techniques: An application for planetary exploration</i>
11.10 - 11.30	A. Azua-Bustos: <i>Have we found evidence of life on Mars using fractal complexity analyses?</i>
11.30 - 11.50	R. V. Nielsen: <i>Accumulation of dust particles in a high efficiency particulate air (HEPA) filter under simulated Martian conditions</i>
11.50 - 12.10	J. Jehlicka: <i>Evaluating mineralogy and microbial colonizations of rocks using miniature Raman spectroscopy: training for Martian missions</i>
12.10-13.30	Lunch Break
Experiments	
Session chair	Tina S. Temkiv
13.30 - 13.50	C.S. Cockell: <i>Mars Analogues for space exploration – A summary of results</i>
13.50 - 14.10	K. Beblo-Vranesevic: <i>Survival of MASE strains under different aspects of simulated Martian conditions</i>
14.10 - 14.30	P. Rettberg: <i>MEXEM – Mars Exposed Extremophile Mixture – a space experiment to investigate the capability of anaerobic organisms to survive on Mars</i>
14.30 - 14.50	P. Schwendner: <i>Metabolic response of Yersinia intermedia MASE-LG1 to osmotic stress</i>
14.50 - 15.20	Coffee break
15.20 - 15.40	J. Heinz: <i>Enhanced Microbial Survival in Brines at Subzero Temperatures</i>
15.40 - 16.00	D. Maus: <i>Brines formed by Deliquescence as a Habitat for Methanogenic Archaea</i>

16.00-16.20	E. N. Bak: <i>Effects of wind driven saltation on the survival of bacteria on Mars</i>
16.20 - 16.40	M. Malki: <i>Comparative resistance of subsurface Tessarococcus isolates from the Iberian Pyrite Belt to simulated Martian conditions</i>
Session chair	Ole Knudsen
16.40 - 17.30	Poster Session: <i>Flash presentations</i> (1min)
17.30 - 20.30	Poster session with local beers

**Wednesday
16th.08.2017**

**Space Factor
Contest**

9.15 - 9.25	Space factor contest: Introduction by Lena Noack
9.25 - 9.40	J. Livingston: <i>200 Candidates and Validated Planets from Year Two of K2</i>
9.40 - 9.55	C. Verseux: <i>Cyanobacteria as a substrate for heterotrophs – Implications for biological life-support systems on Mars</i>
9.55 - 10.10	Uyama Taichi: <i>Search for Exoplanet around Young Stellar Objects</i>
10.10 - 10.25	D. Boy: <i>Abundance of radiation-resistant bacteria along an aridity gradient in the Atacama Desert – Are radiation- and desiccation resistance connected from the habitat perspective?</i>
10.25 - 10.55	Coffee Break
10.55 - 11.10	A. V. Dass: <i>Hydrogels</i>
11.10 - 11.25	A. B. Price: <i>Autotrophy and biomineralisation of nitrate-dependent iron oxidisers on Mars-relevant mineral substrate</i>
11.25 - 11.40	P. Nauny: <i>Dry riverbed in the Atacama desert: a depth profile analysis for biosignatures</i>

11.40 - 11.55 F. Niloofar: *Survival of halophilic archaeon Halovarius luteus gen. nov., sp. nov., to desiccation, simulated Martian UV radiation and vacuum in comparison to Bacillus atrophaeus*

11.55 - 12.00 Closing “Space Factor contest” by Lena Noack

12.00 - 13.30 Lunch break

Experiments

Session chair **Ebbe N. Bak**

13.30 - 13.50 R. de la Torre Noetzel: *Survival of lichens on the ISS-II: ultrastructural and morphological changes of Circinaria gyrosa after space and Mars-like conditions*

13.50 - 14.10 A. Papadopoulos: *Tolerance of lichen-associated bacteria to astrobiological relevant conditions*

14.10 - 14.30 D. Billi: *Endurance of desert-cyanobacteria biofilms to space and simulated Mars conditions during the EXPOSE-R2 space mission*

14.30 - 14.50 B. J. A Mooij: *Time-resolved Raman spectroscopy for the detection of biomarkers in layered samples*

14.50 - 15.10 S. Bagh: *Systems biology unfolds novel cellular, metabolic and disease signatures and networks in microbes and human cells in microgravity*

14.40 - 15.10 Coffee Break

Session chair **Frances Westall**

15.10 - 15.30 Yuko Kawaguchi: *500 μm cell-aggregate of Deinococcus spp. was sufficient to survive after one-year exposure on ISS orbit in Tanpopo mission*

15.30 - 15.50 R. L. Mancinelli: *Using a spinning satellite to determine the effect of gravity on ecosystem N-cycling*

15.50 - 16.10 S. Ohno: *The Biopause Project: Balloon Experiments for Sampling Stratospheric Bioaerosol*

16.10 - 16.30 S. Onofri: *The BIOMEX space experiment: biosignatures detected after ground-based Science Verification Tests (SVT) in space and simulated Mars conditions*

16.30 - 16.50	M. Baqué: <i>Preservation of carotenoids in cyanobacteria and green algae after space exposure: a potential biosignature detectable by Raman instruments on Mars</i>
18.00 - 19.15	Visit to the Aarhus Museum of Fine Arts (AROS)
19.30 - 22.00	Conference Dinner

Thursday
17th.08.2017

Organics

Session chair **Nils Holm**

9.15 - 9.25	Announcements
9.25 - 9.45	M. Polgári: <i>Microbial mediation of minerals –terrestrial or parent body processes?</i>
9.45 - 10.05	H. L. Pleyer: <i>A Novel Wet–Dry Apparatus for Simulating Prebiotic Hydration–Dehydration Cycles under Strictly Anaerobic Atmospheres</i>
10.05 - 10.25	T. P. Kee: <i>Towards a Generalized Theory of Living</i>
10.25 - 11.00	Coffee Break
11.00 - 11.20	K. Kobayashi: <i>"Is the Strecker Synthesis a Major Formation Pathway of Amino Acids in Space?"</i>
11.20 - 11.40	W. Erdamnn: <i>Influence of hypmagnetic conditions on Earths organisms in the context of different variants of panspermia theory</i>
11.40 - 12.00	S. Jheeta: <i>Space Travel: Challenges Ahead</i>
12.00 - 13.30	Closing: Space Factor and Poster awards/Presentation of EANA 2018/Lunch Box