

**Astrobiology 2017 & IAP Planet Topers joined meeting
Program**

- **9:30-10:00 registration, welcome coffee**

Invited talk (30 + 10 min questions)

- **10:00-10:40 Denis Defrère⁽¹⁾, A. Léger⁽²⁾, J.L. Grenfell⁽³⁾, M. Godolt⁽³⁾, A Garcia Munoz⁽³⁾, H. Rauer⁽³⁾, and F. Tian⁽⁴⁾**

⁽¹⁾ UR STAR, University of Liège, Belgium; ⁽²⁾ University of Paris-Saclay, France; ⁽³⁾ TU Berlin, Germany; ⁽⁴⁾ Tsinghua University, Beijing, China

“Proxima Cen b: theoretical spectral signatures for different atmospheric scenarios”

Contributed talks (15 + 5min questions)

- **10:40-11:00 Artem Burdanov** and Michael Gillon

AGO, UR STAR, University of Liège, Belgium

“SPECULOOS: exploring the nearest ultracool dwarfs for terrestrial exoplanets”

- **11:00-11:20 Kyriaki I. Antoniadou** and Anne-Sophie Libert

NaXys, Department of Mathematics, University of Namur

“To what extent do habitable planets co-exist with giants on eccentric orbits?”

-**11:20-11:40 Denis Defrère¹, Alain Léger², and Olivier Absil¹**

⁽¹⁾ UR STAR, University of Liège, Belgium; ⁽²⁾ University of Paris-Saclay, France

“How to characterize habitable planets in the alpha Centauri system?”

-**11:40-12:00 Lena Noack**; Attilio Rivoldini and Tim Van Hoolst

Royal Observatory of Belgium

"Volcanism and outgassing of stagnant-lid planets: Implications for the habitable zone"

- **12:00-12:20 R.M.G. Armytage^{1*}, V. Debaille¹, A.D. Brandon², C.B. Agee³**

¹Laboratoire G-Time, CP 160/02, Université Libre de Bruxelles, Ave Fr. Roosevelt 50, 1050 Bruxelles, Belgium.

²Earth and Atmospheric Sciences, University of Houston, Houston, TX, 77204, USA ³Institute of Meteoritics, University of New Mexico, Albuquerque, NM, USA

“The meteorite NWA 7034 and constraints on the early differentiation history of Mars”

-**12 :20-12:40 M. van Ginneken¹, J. Gattacceca², P. Rochette², C. Sonzogni², A. Alexandre², V. Vidal², M.J. Genge³**

VUB/ULB, Belgium. ²CNRS/Aix-Marseille Université, CEREGE UM34, Aix-en-Provence, France. ³Imperial College London, UK.

“The parent body controls on cosmic spherule texture: Evidence from the oxygen isotopic compositions of large micrometeorites”

12:40-13:40 lunch (sandwiches)

Invited talk (40 + 10 min)

-13:40-14:30 Hervé Martin

Université Clermont-Auvergne, Sciences de la Terre

« Why Archaean TTG cannot be generated by MORB melting in subduction zones: Implications for the evolution of life”

Contributed talks (15 + 5min questions)

-14:30-14:50 Luc André¹, Kathrin Abraham^{2,1,5}, Stephen F. Foley^{3,5}, and Axel Hofmann⁴

1. Earth Sciences Department, Royal Museum for Central Africa, Leuvensesteenweg 13, Tervuren, B-3080, Belgium.; 2 University of Oxford, Department of Earth Sciences, Oxford, United Kingdom; 3 Dept. Earth and Planetary Sciences and ARC Centre of Excellence for Core to Crust Fluid Systems, Macquarie University, North Ryde 2109, Australia; 4 Department of Geology, University of Johannesburg, South Africa.; 5 Institut für Geowissenschaften, Universität Mainz, Becherweg 21, D-55099 Mainz, Germany.

“Silicon isotopes as markers for the onset of surface products recycling in the Archaean”

-14:50-15:10 A.N.Wainwright^{1*}, V. Debaille¹, J. Berger

¹Laboratoire G-Time, Université Libre de Bruxelles, Belgium, *awainwri@ulb.ac.be

²Géosciences Environnement Toulouse, Université Paul Sabatier, Toulouse, France

“Constraints from the West African Craton on Archean mantle dynamics”

-15:10-15:30 Lucas Demaret^{1,2}, Cedric Malherbe¹, Emmanuelle Javaux², Gauthier Eppe¹

¹MoISYS, ULg ; ²UR GEOLOGY, University of Liège

“Analytical approach for the detectability of organics in mineral powders by Raman spectroscopy in preparation for future Mars exploration missions”

- 15:30-15:50 Yohan Cornet¹, J. Beghin¹, B K. Baludikay¹, C. François¹, J.-Y. Storme¹, P. Compère², E.J. Javaux¹

¹ UR GEOLOGY, University of Liège, ² Department of Biology, Ecology and Evolution, University of Liège

“Microanalyzes of remarkable microfossils of the Late Mesoproterozoic–Early Neoproterozoic”

- 15:50-16 :10 coffee break

-16:10-16:30 Camille François¹, B. K. Baludikay¹, D. Baudet², JL Birck³, JY Storme¹, JL Paquette⁴, M. Fialin⁵, V. Debaille⁶ & E. J. Javaux¹

¹ UR Geology, University of Liege, Belgium; ² Earth Sciences Department, Royal Museum for Central Africa, Tervuren, Belgium; ³ Laboratoire de Géochimie des enveloppes externes (UMR 7154 CNRS), IPGP, Paris; ⁴ Laboratoire Magmas et Volcans (CNRS UMR 6524), Université B. Pascal, Clermont-Ferrand, France ; ⁵ Camparis, Université Paris 6, Paris, France ; ⁶ Laboratoire G-Time, Université Libre de Bruxelles

How to date a sedimentary serie: Different approaches to better constrain the diversification of early eukaryotes in Central Africa (Mbuji-Mayi Supergroup, Proterozoic, DR Congo)

-16:30-16:50 Marie Catherine Sforza¹, M. Daye², P. Philippot³, A. Somogyi⁴, M. A. van Zuilen³, K. Medjoubi⁴, E. Gérard³, F. Jamme⁴, C. Dupraz⁵, O. Braissant⁶, C. Glunk⁷, P. T. Visscher⁸

¹ UR GEOLOGY, University of Liège, ² MIT, Department of Earth, Atmospheric and Planetary Sciences, USA ; ³ IPGP, 1 rue Jussieu, 75005 Paris, France ; ⁴ Synchrotron Soleil, Gif-sur-Yvette, France ; ⁹ Department of Geological Sciences, Stockholms Universitet, Stockholm.; ¹⁰ Center for Biomechanics and Biocalorimetry, University of Basel, Basel, Switzerland. ; ¹¹ Societe Suisse des Explosifs SA, Brig, Switzerland. ; ¹² Department of Marine Sciences, University of Connecticut, Groton, CT, USA.

Patterns of metal distribution in hypersaline microbialites: Implications for the fossil record

-16:50-17:10 Séverine Robert & AC Vandaele

BISA

"Scientific preparation for nomad nadir measurements".

- 17:10-17:30 Maria Valdes & Vinciane Debaille

Laboratoire G-Time, Université Libre de Bruxelles, Brussels, Belgium

« Investigating the Moon's early differentiation using calcium Isotopes”

-17:30-17:50 Camille Cartier¹, Olivier Namur^{1,2}, Bernard Charlier¹

¹Department of Geology, University of Liege, 4000 Sart Tilman, Belgium; ²Institut für Mineralogie, Leibniz Universität Hannover, 30167 Hannover, Germany

“Inner planets, reduced planets? The case of Mercury”

-17:50-18:10 Cedric Gillmann, Gregor Golabek, Paul Tackley, Sean Raymond

Royal Observatory of Belgium, University of Bordeaux

Changes in surface conditions and mantle convection due to impacts on Venus and Mars.

-18:10-18:20 Christian Muller

BUSOC, former EANA secretary

A brief history of astrobiology in Belgium.

-18:20 EANA Belgian representative selection

18:30: end of meeting