

## Newsletter 19-50

Issue 19-50, November 9, 2019

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PLANETS 2020 MEETING ABSTRACT DEADLINE EXTENDED TO NOV. 11

Please note that, following the recent events in Chile, the deadline for abstracts is extended to Monday 11/November/2019 at 12UT for the Planets 2020 meeting “Ground and space observatories: a joint venture to planetary science” being held March 2-6, 2020 in Santiago, Chile.

<https://conference.almaobservatory.org/planets2020/> [1]

Registration and abstract submission:

<https://conference.almaobservatory.org/planets2020/registration> [2]

Please also note that the page for the payment of the registration fee is now open.

See link below. This page will remain open after the deadline.

<https://www.eso.org/public/shop/category/conferenceitem/planets2020/> [3]

We hope to see you next year in Santiago!

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**ICARUS NEWS: SELECTION OF NEW ASSOCIATE EDITOR**

We are delighted to appoint Brandon Johnson as a new Associate Editor for Icarus, as Francis Nimmo has stepped down from this role. We are very grateful to Francis for his years of dedicated service as an Associate Editor. Brandon will be handling papers in various areas, including geophysics and geology. Brandon is an Associate Professor in the Department of Earth, Atmospheric, and Planetary Sciences at Purdue University. He received his B. S. in Physics from Michigan Technological University and Ph.D. in Physics from Purdue University. His principal research interests are impact cratering, planetary geophysics, and planetary surface processes. In his work he primarily uses numerical models to simulate the formation of craters or other processes of interest. During his postdoc at MIT he worked on GRAIL mission which sparked his interest in planetary gravity and other geophysical observations. Recently he has been working on understanding the formation of multiring basins and impact fragmentation. Brandon is also interested in meteorites and what they can tell us about the early solar system, reduction of friction in landslides and earthquakes, terrestrial bombardment history, and ocean worlds.

Dr. Rosaly Lopes  
Icarus Editor-in-Chief

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**DPS NOMINATING SUBCOMMITTEE SEEKS NOMINATIONS FOR STUDENT REPRESENTATIVE ON THE DPS COMMITTEE**

Are you a student? Do you know a student?

There is a new student representative position on the DPS Committee.

Are you a student? Consider applying! Do you know a student who would bring a fresh perspective to DPS leadership? Encourage them to apply!

We are accepting applications via [this form](#) [4] until December 1st, 2019.

Applications are currently under-subscribed.

Thank you,

Carrie Nugent, Matthew Knight, and Desireé Cotto-Figueroa,

DPS Nominating Sub-Committee

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#### OPAG ANNOUNCEMENT

OPAG Findings Fall 2019 now posted to OPAG Website, see:

<https://www.lpi.usra.edu/opag/meetings/aug2019/Findings.pdf> [5]

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#### SOFTWARE SYSTEMS FOR ASTRONOMY REGISTRATION OPEN

Please note that registration is now open for the summer school in Software Systems for Astronomy (SSfA-7). The course will take place 20-Jul to 31-Jul, 2020, on the

Big Island of Hawaii. The course covers software design and implementation of

telescope and instrument control systems, observation planning tools, and software

for analyzing and archiving astronomical data.

If you are not a UHH student, use this link to register:

<https://hilo.hawaii.edu/depts/summer/SummerAdmissions.php> [6]

If you are a UHH student, use this link to register:

<https://hilo.hawaii.edu/depts/summer/SummerCourseRegistration.php> [7]

More information can be found here:

<http://astro.uhh.hawaii.edu/Summer/Summer-2020/summer2020.php> [8]

Interested students are encouraged to fill in this short questionnaire:

<http://132.160.60.71/~aconrad/ssfaQuest.html> [9]

Direct questions to [aconrad@hawaii.edu](mailto:aconrad@hawaii.edu) [10]

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### PLANETARY FORMATION SESSION AT COSPAR 2020

Dear Colleagues,

we wish to invite you to attend the event B0.1: "Unifying planetary system formation out of elementary building blocks: from dust, gas and ice to our Solar System and exoplanets" at the 43rd COSPAR Scientific Assembly that will be held in Sydney,

Australia, 15-22 August 2020 (<https://www.cospar2020.org/> [11], <https://www.cospar-assembly.org/> [12])

\*\*\*\*\*IMPORTANT DATE\*\*\*\*\*

ABSTRACT SUBMISSION DEADLINE is 14 FEBRUARY 2020

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### Scientific Rationale

The assembly of planetary systems can no longer be considered a process exclusive to mature circumstellar (i.e., protoplanetary) disks, as strings of evidence are pushing its onset to the earliest phases of star formation. These findings require previously separate communities to come together and to exchange expertise. This event offers

the venue for such exchange in the form of a unique interdisciplinary platform for discussing the full evolutionary sequence of our Solar System and of exoplanetary systems that may be analogous and different from our own. The event is open to experts on the Solar System, its small and large bodies; exoplanets; protoplanetary disks, embedded and prestellar phases of star formation. It will cover studies of gas, ice, dust and larger bodies from theoretical, observational and experimental perspectives. This science is stimulated by the increasing amount of in-situ measurements from past missions such as Cassini and Rosetta, present missions like New Horizons, and upcoming missions such as JUICE and Europa Clipper. Simultaneously, the field is being revolutionized with interferometric observations from powerful facilities such as ALMA, exoplanet demographics from transits and radial velocities (e.g., TESS, ESPRESSO) and with experimental studies in state-of-the-art laboratories simulating the various space environments. This event is sponsored by and coordinated with Commissions B1, E4 and F3.

#### Confirmed Invited Speakers

Fred Ciesla (University of Chicago, U.S.A.)

Joanna Drażkowska (University Observatory of the Ludwig Maximilian University of Munich, Germany)

Davide Fedele (INAF/Osservatorio Astrofisico di Arcetri, Italy)

Mark Krumholz (ANU, Australia)

Jeong-Eun Lee (Kyung Hee University, South Korea)

Yamila Miguel (Leiden University, The Netherlands)

Paola Pinilla (Max Planck Institute for Astronomy in Heidelberg, Germany)

Alessandro Sozzetti (INAF/Osservatorio Astronomico di Torino, Italy)

Frances Westall (CNRS in Orléans, France)

Makoto Yoshikawa (JAXA, Japan)

## Main Scientific Organizers

Maria Drozdovskaya (CSH; Switzerland) & Diego Turrini (INAF-IAPS; Italy)

## Scientific Organizing Committee

Michael Ireland, ANU, Australia;

Stavro Ivanovski, INAF-OATS, Italy;

Niels Ligterink, CSH, Switzerland;

Gianfranco Vidali, Syracuse, U.S.A.;

Eric Herbst, UVA, U.S.A.;

Martin Rubin, UniBe, Switzerland;

Trevor Ireland, ANU, Australia;

Raphael Marschall, SwRI, U.S.A.;

Sho Sasaki, Osaka, Japan;

Sean Andrews, CfA, U.S.A.

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## JOBS, POSITIONS, OPPORTUNITIES

### A) COSMOCHEMISTRY POSITION AT THE UNIVERSITY OF COLORADO, BOULDER

The Laboratory for Atmospheric and Space Physics (LASP) at the University of Colorado at Boulder invites applications for a tenure-track assistant professor position to start in August 2020, in the general field of Cosmochemistry. The successful candidate is expected to establish a vigorous program, complementary to the ongoing research of the Institute for Modeling Plasmas, Atmospheres, and Cosmic Dust (IMPACT):

<http://impact.colorado.edu> [13]), a node in NASA's Solar System Exploration Research Virtual Institute (SSERVI).

Areas of interest include: Analysis and interpretation of composition measurements of cosmic dust and their significance for studies of the origins and evolution of the solar system. Development of new laboratory experiments at the Colorado Dust Accelerator Facility to support instrument development and data analysis. Using dust composition measurements to model the chemical evolution of solar system bodies: Moon, asteroids, comets, and all other planetary objects. Applicants should have a Ph.D. in Physics, Planetary Sciences, Chemistry, or related areas completed by March 15, 2020.

Review of applications will begin on January 15, 2020 and will continue until the position is filled. For consideration, applications must be submitted online:

<https://jobs.colorado.edu/jobs/JobDetail/Assistant-Professor-in-Cosmochemistry/22080> [14]. Contact Email: [cosmochemist.search@colorado.edu](mailto:cosmochemist.search@colorado.edu) [15].

## B) RESEARCH SCIENTIST AT LOCKHEED MARTIN

Lockheed Martin Space seeks a Research Scientist to join teams that design, develop, and operate planetary missions and space-science instrumentation. The Deep Space Exploration (DSE) directorate of Lockheed Martin has a long history of providing spacecraft and hardware solutions for many planetary missions, including missions to the Moon, Mars, asteroids, comets, and Jupiter. The Advanced Technology Center (ATC) is the research lab for LM Space, and within the ATC the Space Science and Instrumentation (SS&I) pursues fundamental space-science research and the development of prototype flight instruments and payloads. The successful candidate will play a key technical and leadership role in Planetary Science as part of these teams. The position

is based in the Lockheed Martin facility in Littleton, CO.

More details are available at the following link:

<https://www.lockheedmartinjobs.com/job/littleton/deep-space-planetary-research-scientist/694/13948660> [16]

Please contact Tim Linn ([timothy.m.linn@lmco.com](mailto:timothy.m.linn@lmco.com) [17]) and Beau Bierhaus ([edward.b.bierhaus@lmco.com](mailto:edward.b.bierhaus@lmco.com) [18]) with any questions.

### C) POSTDOCTORAL RESEARCHER WITH THE MAVEN IMAGING ULTRAVIOLET SPECTROGRAPH TEAM

Summary: The Laboratory for Atmospheric and Space Physics (LASP) at the University of Colorado Boulder is seeking a talented scientist to work with the Imaging Ultraviolet Spectrograph (IUVS) team on the MAVEN mission. The IUVS team has made important discoveries in the areas of Mars aeronomy, atmospheric escape and evolution, aurora, nightglow, photochemistry, composition, dynamics and cloud formation, and more discoveries are anticipated. The team is led by Nick Schneider.

Key Responsibilities: Observational studies of the Mars atmosphere through ultraviolet spectroscopy and imaging. Scientific analysis of data obtained, publication of results in appropriate scientific journals and presentation at conferences. Support for mission/instrument operations and observation planning. Operation and enhancement of automated data processing pipelines including retrievals of atmospheric properties. Mentoring of graduate and undergraduate student researchers.

Position Requirements: Ph.D in Planetary Science, Astronomy, Atmospheric

Science, Physics or a related field. Coding proficiency in python, IDL or other scientific computing languages.

Desired Qualifications: Skill with data analysis, image processing and statistics.

Familiarity with Mars atmospheric science, including one or more of the following: atmospheric structure, dayglow, nightglow, aurora, photochemistry, ultraviolet spectroscopy, atmospheric evolution, climate, waves and tides, familiarity with General Circulation Models and numerical simulation.

Please see <https://jobs.colorado.edu/jobs/jobDetail?jobId=21086> [19] for additional information about the University, LASP, benefits, etc. The University of Colorado Boulder is committed to building a culturally diverse community of faculty, staff, and students dedicated to contributing to an inclusive campus environment. We are an Equal Opportunity employer, including veterans and individuals with disabilities. Review of applications begins on 15 December. Start date is negotiable.

#### D) POST-DOC JOB ANNOUNCEMENT

U.S. Geological Survey - Mendenhall Research Fellowship Program - Research Opp. #18-27. Evaluating mineral resources on Mars for exploration and colonization. Closing date: January 6, 2020. GS-12 two-year appointment. Duty station: Lakewood, Colorado, USA. Areas of Ph.D.: Geology, planetary geology, imaging spectroscopy, and mineral spectroscopy or related fields. The Denver Spectroscopy Group is seeking a postdoctoral fellow to conduct research focused on creating mineral maps of the Martian surface using orbital imaging spectrometer and broadband data emphasizing key minerals to pinpoint sites most favorable for habitat location. A related research topic involves spectrally mapping relict hydrothermal deposits to answer stubborn questions about their origin and where to focus future rover efforts to potentially discover evidence of past life. A research proposal is the most important part of the application package and will be evaluated by an expert panel. Applicants are strongly urged to coordinate the development of their proposal with the USGS research advisor (i.e., Gregg Swayze; [gswayze@usgs.gov](mailto:gswayze@usgs.gov) [20]).

<https://www.usgs.gov/centers/mendenhall/18-27-evaluating-mineral-resources-mars-exploration-and-col>

[onization](#) [21]

#### E) PH.D. STUDENT OPPORTUNITY

We have an opening for a Ph.D. student interested in experimentally investigating the interaction of volcanic gas and martian surface materials and assessing the IR spectral signature of the products beginning Fall 2020. The student will work with Dr. Hanna Nekvasil on experiments simulating boiling of magma and investigate the nature of vapor-deposited salts added to martian dust as well as the alteration of basalt by martian volcanic gas. The student will also work with Dr. A. Deanne Rogers on assessing the IR spectral signature of the martian fines altered by volcanic gas and how this signature is modified by reaction during changes in relative humidity. Interested students should contact [Hanna.Nekvasil@stonybrook.edu](mailto:Hanna.Nekvasil@stonybrook.edu) [22]. Stony Brook University has a dynamic planetary science group and a long history of excellence in experimental igneous petrology. Please pass this message on to any student you think may be interested.

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Send submissions to:

Anne Verbiscer, DPS Secretary ([dpssec@aaas.org](mailto:dpssec@aaas.org) [23])

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To unsubscribe or update your information, please send your request

to [privacy@aaas.org](mailto:privacy@aaas.org) [24]. The more general AAS privacy policy is available

online at <https://aaas.org/about/policies/privacy-policy> [25]. Current and back

issues of the DPS Newsletter can be found at <https://dps.aas.org/newsletters> [26]

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**Source URL:** <https://dps.aas.org/newsletters/19-50>

**Links**

- [1] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_conference.almaobservatory.org\\_planets2020\\_&d=DwMFAw&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=vfn1RKjZklLoblQ4Dox4PiigRZnfiuzYb-HI49B4onl&m=EScxfiP-PZ0HLNba68RPQTeTWztTkogszG\\_kNnGRZCM&s=VpHlfuP4vgB0t37jVgy7F1xX5GVAYr4LI4wVqUZUqVA&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__conference.almaobservatory.org_planets2020_&d=DwMFAw&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=vfn1RKjZklLoblQ4Dox4PiigRZnfiuzYb-HI49B4onl&m=EScxfiP-PZ0HLNba68RPQTeTWztTkogszG_kNnGRZCM&s=VpHlfuP4vgB0t37jVgy7F1xX5GVAYr4LI4wVqUZUqVA&e=)
- [2] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_conference.almaobservatory.org\\_planets2020\\_registration&d=DwMFAw&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=vfn1RKjZklLoblQ4Dox4PiigRZnfiuzYb-HI49B4onl&m=EScxfiP-PZ0HLNba68RPQTeTWztTkogszG\\_kNnGRZCM&s=8a6iSBAYw4XOWIFKN\\_rjI5uPVwyjqvT0kvYEGrwJQX8&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__conference.almaobservatory.org_planets2020_registration&d=DwMFAw&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=vfn1RKjZklLoblQ4Dox4PiigRZnfiuzYb-HI49B4onl&m=EScxfiP-PZ0HLNba68RPQTeTWztTkogszG_kNnGRZCM&s=8a6iSBAYw4XOWIFKN_rjI5uPVwyjqvT0kvYEGrwJQX8&e=)
- [3] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_www.eso.org\\_public\\_shop\\_category\\_conferenc\\_eitem\\_planets2020\\_&d=DwMFAw&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=vfn1RKjZklLoblQ4Dox4PiigRZnfiuzYb-HI49B4onl&m=EScxfiP-PZ0HLNba68RPQTeTWztTkogszG\\_kNnGRZCM&s=rNHWyGbenCilykHc2JuChlLdlqOfb4k-OIjDhDKPLo&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__www.eso.org_public_shop_category_conferenc_eitem_planets2020_&d=DwMFAw&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=vfn1RKjZklLoblQ4Dox4PiigRZnfiuzYb-HI49B4onl&m=EScxfiP-PZ0HLNba68RPQTeTWztTkogszG_kNnGRZCM&s=rNHWyGbenCilykHc2JuChlLdlqOfb4k-OIjDhDKPLo&e=)
- [4] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_forms.gle\\_fw1G4p4JnQ5qnL2m8&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=BLpnbup5GxYcsKe5mkLlhMxGkrZwRnhd1SLCQstbZ8&s=bnvfjFigXT69dT3OybUyPoWahLluCFvhV\\_gdzbu2wX8&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__forms.gle_fw1G4p4JnQ5qnL2m8&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=BLpnbup5GxYcsKe5mkLlhMxGkrZwRnhd1SLCQstbZ8&s=bnvfjFigXT69dT3OybUyPoWahLluCFvhV_gdzbu2wX8&e=)
- [5] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_www.lpi.usra.edu\\_opag\\_meetings\\_aug2019\\_Findings.pdf&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=BLpnbup5GxYcsKe5mkLlhMxGkrZwRnhd1SLCQstbZ8&s=0iiq9pODlodNkx0GSaTDCxd619pGaKUC9M2N0ILfoA0&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__www.lpi.usra.edu_opag_meetings_aug2019_Findings.pdf&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=BLpnbup5GxYcsKe5mkLlhMxGkrZwRnhd1SLCQstbZ8&s=0iiq9pODlodNkx0GSaTDCxd619pGaKUC9M2N0ILfoA0&e=)
- [6] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_hilo.hawaii.edu\\_depts\\_summer\\_SummerAdmissions.php&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=BLpnbup5GxYcsKe5mkLlhMxGkrZwRnhd1SLCQstbZ8&s=bVDXOWTrNuR4\\_t1VP1Bbg3-s2iq-YcixUB3xBH\\_Jbrl&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__hilo.hawaii.edu_depts_summer_SummerAdmissions.php&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=BLpnbup5GxYcsKe5mkLlhMxGkrZwRnhd1SLCQstbZ8&s=bVDXOWTrNuR4_t1VP1Bbg3-s2iq-YcixUB3xBH_Jbrl&e=)
- [7] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_hilo.hawaii.edu\\_depts\\_summer\\_SummerCourseRegistration.php&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=BLpnbup5GxYcsKe5mkLlhMxGkrZwRnhd1SLCQstbZ8&s=2dZYQv4Ygaqc\\_ffa8LL9pH-6EZA81m0lbf9MFu6lXg&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__hilo.hawaii.edu_depts_summer_SummerCourseRegistration.php&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=BLpnbup5GxYcsKe5mkLlhMxGkrZwRnhd1SLCQstbZ8&s=2dZYQv4Ygaqc_ffa8LL9pH-6EZA81m0lbf9MFu6lXg&e=)
- [8] [https://urldefense.proofpoint.com/v2/url?u=http-3A\\_\\_astro.uhh.hawaii.edu\\_Summer\\_Summer-2D2020\\_summer2020.php&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=BLpnbup5GxYcsKe5mkLlhMxGkrZwRnhd1SLCQstbZ8&s=6VNmKCRjfyf5et6qjwP ERDxAErnrG3WbgxGN1NVNSY&e=](https://urldefense.proofpoint.com/v2/url?u=http-3A__astro.uhh.hawaii.edu_Summer_Summer-2D2020_summer2020.php&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=BLpnbup5GxYcsKe5mkLlhMxGkrZwRnhd1SLCQstbZ8&s=6VNmKCRjfyf5et6qjwP ERDxAErnrG3WbgxGN1NVNSY&e=)
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- [11] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_www.cospar2020.org\\_&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=BLpnbup5GxYcsKe5mkLlhMxGkrZwRnhd1SLCQstbZ8&s=f4hRXSATmz0dje1fGb5ahLssncbOMmuUtBTCPUzToQA&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__www.cospar2020.org_&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=BLpnbup5GxYcsKe5mkLlhMxGkrZwRnhd1SLCQstbZ8&s=f4hRXSATmz0dje1fGb5ahLssncbOMmuUtBTCPUzToQA&e=)
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