

Newsletter 18-51

Issue 18-51, December 16, 2018

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NEW HORIZONS ULTIMA THULE PUBLIC ENGAGEMENT PROJECT:
BEAM YOUR GREETING TO ULTIMA THULE ON FLYBY DAY

NASA's New Horizons spacecraft is poised to conduct the farthest planetary flyby ever - an encounter with the Kuiper Belt object 2014 MU69, nicknamed "Ultima Thule" - on January 1, 2019. The project is involving the public by letting them send their names and messages to New Horizons as it speeds past Ultima four billion miles away. The messages will reach the spacecraft on flyby day.

Submissions are being accepted at pluto.jhuapl.edu/Send-Greetings/?fbclid=IwAR03sj0ZAxL-OrAgmseWn9ZXMKW_22bkr3dU_EdUKZcR0VwP0J7wZ4EA8LY [1]

through December 21, 2018.

We encourage colleagues in the planetary science community to send messages themselves and to share this public engagement opportunity with their classes,

colleagues, families, and social media circles.

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VENUS EXPLORATION DECADAL SURVEY WHITE PAPERS

The Venus Exploration Analysis Group (VEXAG) will be conducting a multi-step campaign through March 2019 to develop a coherent set of Venus Exploration Decadal Survey White Papers.

1) Link to Pre-Decadal White Paper VEXAG encourages all Venus community members to consider short, to the point Decadal Survey White Papers. A spreadsheet for these contributions is:

https://docs.google.com/spreadsheets/d/1TZGokHrej3_oP77mTeaj8oVTUY9sO6tvmKqCc537nEc/edit?usp=sharing [2]

This link and links to the white papers themselves will be on the [VEXAG website](#) [3].

2) Key Document Revisions: The VEXAG Goals, Objectives, and Investigations (GOI), Venus Roadmap, and Venus Technology Plan documents are being revised in preparation for the next Decadal Survey.

2a) Access to the Key VEXAG Documents (12/21/18): The current working drafts of each document will be posted on the VEXAG site for community review and comments

2b) Venus Community Telecon (Monday, 2/4/19): A public open telecon to discuss these documents will be held from 4-6pm EDT. This telecon will cover current versions of the documents.

2c) Predecadal Review Session at LPSC (Sunday, 3/17/19): VEXAG will host a special review session immediately before LPSC from 1-4 pm CDT to solicit additional feedback on these key documents. Additional information (e.g., call in numbers, schedules) will be posted to the VEXAG website.

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THE FIRST LADY ASTRONAUT TRAINEES: TIME FOR A CONGRESSIONAL GOLD MEDAL

The Congressional Gold Medal, our nation's highest civilian honor, has been given over 200 times. Less than 10% of the medals have been received by women and less than that have been awarded for outstanding contributions in air and space exploration. The good news is that legislation to award Gold Medals to the "Hidden Figures" is moving forward and the better news is that momentum is building to also support a nomination for the First Lady Astronaut Trainees (FLATs), also known as the "Mercury 13".

Read more at

<http://womeninastronomy.blogspot.com/2018/12/the-first-lady-astronaut-trainees-time.html> [4]

Add your name to the petition directly at

https://docs.google.com/forms/d/e/1FAIpQLScdXGXlrYNZOvxpRwOiMN-OcFX4rfN4nGcWsCBCK_Ge0zmDtG/viewform [5]

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ABSCICON 2019: EXPLORING THE PLANETARY SYSTEM OF ALPHA CENTAURI

We invite you to submit an abstract to the 2019 Astrobiology Science Conference, which will be held on 24-28 June 2019 in Bellevue, Washington to the session entitled "Exploring the planetary system of Alpha Centauri: current knowledge, opportunities, and techniques". The Alpha Centauri system (AB and Proxima) presents a unique opportunity to detect and characterize a habitable planet in the next decade. This is because Alpha

Centauri is not merely the closest star system to the Sun, but an unusually favorable outlier. It is 2.4 times closer than the next nearest non-M-dwarf star, and the habitable zones around A and B stars are $\sim 3x$ larger in angle than around any other Sun-like star. An Earth twin around any of the three stars in the system would be 25th magnitude, rather than the ~ 30 th magnitude typically assumed for survey missions. In addition, Proxima Centauri hosts a potentially habitable planet, an attractive target for habitability characterization.

This session aims to survey the current knowledge about the system as well as the opportunities, challenges, instruments, and instrument concepts to detect and characterize the planetary systems of Alpha Centauri, and determine the potential habitability of exoplanets there. This includes studies of binary planet formation, dynamical stability of planetary orbits in the system, limits from current non-detections, as well as expected planet occurrence rates. Techniques and instruments include indirect planet detection with astrometric and RV measurements; direct imaging in optical bands as well as thermal infrared, with current ground-based telescopes, upcoming ELTs, as well as space telescope missions. This session will be an opportunity to bring together the knowledge gathered on the system, and provide focus to the interdisciplinary research needed to detect, characterize, and search for life on planets around Alpha Centauri.

Conveners: R. Belikov (NASA Ames), F. Marchis (SETI Institute), O. Guyon (U. of Arizona)

The deadline for all submissions is Wednesday, 23 January 2019 23:59 EST.
<https://connect.agu.org/abscicon/program/format-schedule> [6] _____

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JOBS, POSITIONS, OPPORTUNITIES

A) POST-DOC POSITION ON EXOPLANETS AT MEUDON OBSERVATORY

The Laboratoire d'Etudes Spatiales et d'Instrumentation en Astrophysique (LESIA, France) invites applications for a postdoctoral fellowship in exoplanet atmospheric and spectroscopic studies. The candidates will join the team funded by the ANR "e-PYTHEAS" (<http://e-pytheas.cnrs.fr/> [7]) led by Dr. Athena Coustenis at LESIA. The initial appointment will be for 18 months, with a possible 6-month extension.

The successful candidate will work closely with Dr. Benjamin Charnay and Dr. Bruno Bézard and also interact with members of the e-PYTHEAS team, including A. Coustenis, P. Drossart, T. Encrenaz (LESIA), P. Lavvas (GSMA, France) and G. Tinetti (UCL, UK), as well as with spectroscopists in the team providing important data for these studies. He/she will also be involved in the preparation of the newly selected ESA ARIEL mission (<https://ariel-spacemission.eu> [8]).

The e-PYTHEAS team obtained new ab initio molecular line lists in the 1-17 μm wavelength region for hydrocarbons and their isotopologues such as $^{12}\text{CH}_4$, $^{13}\text{CH}_4$, CH_3D , C_2H_2 , C_2H_4 and C_2H_6 up to 2500 K (<http://theorets.univ-reims.fr/molecules> [9]). The main goal of the postdoc project is to analyze the effects of these new line lists on transit and emission spectra of warm/hot exoplanets and to estimate the detectability of these molecules by current (HST, VLT, ...) and future telescopes (JWST, ARIEL, ELT). Transit and emission spectra will be produced at low and high spectral resolution using a 1-D radiative-convective

model developed at LESIA (Exo-REM). The candidate will incorporate the new molecular opacities in the atmospheric model and adapt Exo-REM to irradiated planets and transit spectroscopy. He/she will afterwards apply it to brown dwarfs and young giant exoplanets observed by direct imaging (e.g. VLT/SPHERE) and to warm/hot transiting exoplanets observed by e.g. Spitzer or HST.

The successful candidate will be hosted by LESIA in Meudon, France.

The net salary will be around 2400€/month + reimbursement of transport fees. Benefits include complete health insurance coverage and social security, as required by French law. The position is for 18 months.

A PhD in physics, astronomy or a related discipline is required at the time when the position starts. Expertise in radiative transfer and molecular spectroscopy modelling is required.

Applications must be received electronically at:

<https://emploi.cnrs.fr/Offres/CDD/UMR8109-SYLDES-003/Default.aspx> [10]

by February 13th, 2019 for full consideration.

The successful applicant is expected to start between April and October 2019.

B) TENURE-TRACK FACULTY POSITION

DEPARTMENT OF ASTRONOMY

NEW MEXICO STATE UNIVERSITY

The Department of Astronomy at New Mexico State University invites



applications for a tenure-track faculty member at the level of Assistant Professor beginning in August 2019. We are especially interested in candidates with a demonstrated research record and continuing research programs related to the targeted area of hire, which is planetary system science (solar system and/or extrasolar), including planetary atmospheres, interiors, surfaces, formation, and environments, and including research programs that are observational or theoretical in nature. The NMSU Astronomy Department is committed to creating an environment that affirms and supports diversity across a variety of axes, including ethnicity, race, class, ability, gender identity and expression. We particularly welcome applicants who can contribute to such an environment through their scholarship, teaching, mentoring, and professional service. Please see the job ad (<https://jobregister.aas.org/ad/8e66ce6b> [11]) for more details and direct all inquiries to astfaculty@nmsu.edu [12].

The application deadline is January 7, 2019.

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Send submissions to:

Anne Verbiscer, DPS Secretary (dpssec@aaas.org [13])

You are receiving this email because you are a DPS member.

To unsubscribe or update your information, please send your request to privacy@aaas.org [14]. The more general AAS privacy policy is available online at <https://aas.org/about/policies/privacy-policy> [15].

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- [1] https://mail02.ndc.nasa.gov/OWA/redir.aspx?C=rzvHaGyy_jQB6_LfiKS74h3VTOQCq7lrZn0EH6kpc0p6t5__JmTWCA..&URL=http%3a%2f%2fpluto.jhuapl.edu%2fSend-Greetings%2f%3ffbcldid%3dlwAR03sJ0ZAxL-OrAgmseWn9ZXMKW_22bkr3dU_EdUKZcR0VwP0J7wZ4EA8LY
- [2] https://mail02.ndc.nasa.gov/OWA/redir.aspx?C=yvoYGDudhTIDog67trgBflinwQtH11rpZK-vsjitUNR6t5__JmTWCA..&URL=https%3a%2f%2fdocs.google.com%2fspreadsheets%2fd%2f1TZGokHrej3_oP77mTeaj8oVTUY9sO6tvmKqCc537nEc%2fedit%3fusp%3dsharing
- [3] https://mail02.ndc.nasa.gov/OWA/redir.aspx?C=vtEhR3haY7a1HFyp1q02N-12AQsX9U7HwZHctgLRWR56t5__JmTWCA..&URL=https%3a%2f%2fwww.lpi.usra.edu%2fvexag%2f
- [4] https://mail02.ndc.nasa.gov/OWA/redir.aspx?C=qZLULOxAQ2YOUNpmlXls1cOpa3JLqhWVrr1BKfbhKn16t5__JmTWCA..&URL=http%3a%2f%2fwomeninastronomy.blogspot.com%2f2018%2f12%2fthe-first-lady-astronaut-trainees-time.html
- [5] https://mail02.ndc.nasa.gov/OWA/redir.aspx?C=PDGgMhQmbgtJbBrGJcdZCRukeBcnNAfZxq30NkdJB0B6t5__JmTWCA..&URL=https%3a%2f%2fdocs.google.com%2fforms%2fd%2fe%2f1FAIpQLScdXGXIrYNZOvxpRwOiMN-OcFX4rfN4nGcWsCCK_Ge0zmDtg%2fviewform
- [6] https://mail02.ndc.nasa.gov/OWA/redir.aspx?C=BPltYivdu1yovRjmKrjnADgt0aOxywj1_WWGY2Jc_hh6t5__JmTWCA..&URL=https%3a%2f%2fconnect.agu.org%2fabscicon%2fprogram%2fformat-schedule
- [7] https://mail02.ndc.nasa.gov/OWA/redir.aspx?C=39xzUmo_6i67sLFzUMh_OIITE3e6hLsO63LotcMAzBx6t5__JmTWCA..&URL=http%3a%2f%2fe-pytheas.cnrs.fr%2f
- [8] https://mail02.ndc.nasa.gov/OWA/redir.aspx?C=uPL0pHdNrcjcrvmc_VLbc51L51X5St2X3xpGYUcZSUV6t5__JmTWCA..&URL=https%3a%2f%2fariel-spacemission.eu
- [9] https://mail02.ndc.nasa.gov/OWA/redir.aspx?C=iTI3dovu4F3qXT_ixab2O21YnI_M-oQh0yC9Hg6sAct6t5__JmTWCA..&URL=http%3a%2f%2ftheorets.univ-reims.fr%2fmolecules
- [10] https://mail02.ndc.nasa.gov/OWA/redir.aspx?C=AUOgzMDaFFOQlpNUkrTdj_NmdY4tNjn3Vn_Sod3z0Nd6t5__JmTWCA..&URL=https%3a%2f%2femploi.cnrs.fr%2fOffres%2fCDD%2fUMR8109-SYLDES-003%2fDefault.aspx
- [11] https://mail02.ndc.nasa.gov/OWA/redir.aspx?C=zFzLn5WZ9gwCJ5AD6KWKcE8ugBg2qsffrcN6oCqeFQN6t5__JmTWCA..&URL=https%3a%2f%2fjobregister.aas.org%2fad%2f8e66ce6b
- [12] https://mail02.ndc.nasa.gov/OWA/redir.aspx?C=Ax4h6b6mO0Mes8Je8CnQJVw-WkFzDivRsRCAGxfJIZt6t5__JmTWCA..&URL=mailto%3aastfaculty%40nmsu.edu
- [13] https://mail02.ndc.nasa.gov/OWA/redir.aspx?C=7EktF_ac47l6Ao_gpU19yTO-cGeiPlzj_dkP_f7sTneGKL_JmTWCA..&URL=mailto%3adpssec%40aas.org
- [14] https://mail02.ndc.nasa.gov/OWA/redir.aspx?C=h1oTeMI7__dZC9HoAoJq-Rfe728qWrdTx32ozjAi4sneGKL_JmTWCA..&URL=mailto%3aprivacy%40aas.org
- [15] https://mail02.ndc.nasa.gov/OWA/redir.aspx?C=BxsZCsAeS-Leg9oYvCCWEQ9zb2VCW58Zi0TNmBpixHfeGKL_JmTWCA..&URL=https%3a%2f%2faas.org%2fabout%2fpolicies%2fprivacy-policy