

Short Biographical Sketch

Name: Humberto Campins

Job Title: Professor

Professional Address: Physics Department, UCF, Tlf. 407-823-2325 Email: campins@ucf.edu

(a) Professional Preparation

A list of the individual's undergraduate and graduate education and postdoctoral training:

Undergraduate Institution	U. of Kansas	Astronomy	BA, 1977
Graduate Institution	U. Arizona	Planetary Science	MS & Ph.D. 1982
Postdoctoral Institution	U. Maryland	Astronomy	1983 & 1984

(b) Appointments

1. Pegasus Professor and Provost Research Professor of Physics and Astronomy, University of Central Florida, Orlando, Florida. August 2002- present.
2. Program Officer, Research Corporation, and Senior Research Scientist, Lunar and Planetary Laboratory, University of Arizona, Tucson, Arizona. June 1998-August 2002.
3. University of Florida, Department of Astronomy
August 1989 - June 1998, Assistant, Associate, and Full Professor of Astronomy
4. Research Scientist, Planetary Science Institute, 1985 - 1989
5. Research Associate, Astronomy Program, University of Maryland, 1982 -1985.

(c) Publications

1. Spacecraft sample collection and subsurface excavation of asteroid (101955) Benu. By Lauretta, D. S. ; Adam, C. D. ; Allen, A. J. ; Ballouz, R. -L. ; Barnouin, O. S. ; Becker, K. J. ; Becker, T. ; Bennett, C. A. ; Bierhaus, E. B. ; Bos, B. J. ; Burns, R. D. ; **Campins, H.** ; Cho, Y. ; Christensen, P. R. ; Church, E. C. A. ; Clark, B. E. ; Connolly, H. C. ; Daly, M. G. ; DellaGiustina, D. N. ; Drouet d'Aubigny, C. Y. (plus 33 others), *Science* V. 377, Issue 6603, pp. 285-291 (2022)
 2. Widely distributed exogenic materials of varying compositions and morphologies on asteroid (101955) Benu. Tatsumi, E.; Popescu, M.; **Campins, H.** and 8 more authors. *Monthly Not. Royal Astron. Society*, V. 508, Issue 2, pp.2053-2070 (2021)
 3. Spectral diversity of the inner belt primitive asteroid background population. Arredondo, Anicia; **Campins, Humberto**; Pinilla-Alonso, Noemi and 5 more authors. *Icarus*, V. 368, article id. 114619. (2021)
 4. Spectrally blue hydrated parent body of asteroid (162173) Ryugu, Tatsumi, Eri; Sakatani, Naoya; Riu, Lucie and 46 more authors including H. **Campins**. *Nature Communications*, Volume 12, article id. 5837 (2021)
 5. Composition of organics on asteroid (101955) Benu, Kaplan, H. H.; Simon, A. A.; Hamilton, V. E. and 14 more authors including H. **Campins**. *Astronomy & Astrophysics*, Volume 653, id.L1, 11 pp. (2021)
- (ii) List up to five (5) other significant publications/products.
1. Episodes of particle ejection from the surface of the active asteroid (101955) Benu. Lauretta, D.S; Hergenrother, C. W.; Chesley, S. R.; Leonard, J. M.; Pelgrift, J. Y.; Adam, C. D.; Al Asad, M; Antreasian, P. G.; Ballouz, R. L.; Becker, K. J.; Bennett, C. A.; Bos, B. J.; Bottke, W. F.; Brozovic, M.; **Campins, H.** *Science*, V. 366, Issue 6470, pp. (2019).
 2. The unexpected surface of asteroid (101955) Benu. Lauretta, D.S; Dellagiustina, D.N; Bennett, **Campins, H.** and 27 others. *Nature*, V. 568, Issue 7750, p.55-60 (2019).

3. The operational environment and rotational acceleration of asteroid (101955) Bennu from OSIRIS-REx observations. Hergenrother, C.W.; Maleszewski, C. K.; Nolan, M. C.; Li, J.-Y.; Drouet D'Aubigny, C. Y.; Shelly, F. C.; Howell, E. S.; Kareta, T. R.; Izawa, M. R. M.; Barucci, M. A.; Bierhaus, E. B.; **Campins, H.**; and 13 others. *Nature Communications*, Volume 10, id. 1291 (2019)
4. “Solar system: Evaporating asteroid” by **Campins, H.**, and Comfort, C. (2014) *Nature*. Vol. 505, 487-488.
5. Water ice and organics on the surface of the asteroid 24 Themis” by **Campins, H.**, Hargrove, K., Pinilla-Alonso, N, Howell, E., Kelley, M., S., Licandro, J., Mothe´-Diniz, T., Fernández, Y., and Ziffer, J. (2010) *Nature*, vol. 464, 1320-1321.

(d) Graduate teaching experience

- AST 5145: Fall 2020, Fall, 2018, Fall 2016, Fall 2013...

(e) Graduate students mentored (to completion, if applicable)

- List up to 5 most recent- Chair of thesis/dissertation committees, overall number, names of students, degree, year graduated
 - Vanessa Lowry, Ph.D., 2022
 - Anicia Arredondo, Ph.D., 2021
 - Andrew Malfavon, MS, 2021
 - Juan Luis Rizos, Ph.D., 2020
 - Zoe Landsman, Ph.D., 2017
- List up to 5 most recent- Member of thesis/dissertation committees, overall number, names of students, degree, year graduated
 - Mary Hinkle, Ph.D., expected graduation in 2023
 - Isabel Rivera, MS, 2022
 - Stephanie Eckerd, Ph.D. 2022
 - Katerina Slavicinska, MS, 2021
 - George Hatcher, Ph.D., 2015
- List total number of graduate students mentored on thesis/dissertation committees over the course of your career. Approximately 30

(f) Other synergistic activities related to Graduate Education

1. I gave a Jefferson Science Fellow Distinguished Lecture: International Collaboration for Planetary Defense, at the **National Academies of Science**, in Washington, DC, June 15, 2022. I was awarded a 2021-2022 Jefferson Science Fellowship by the National Academies of Science to be a Science Advisor to the US Department of State. I have brought that experience and perspective to UCF students.
2. In the past four years my publications include 12 articles in the very top international journals. Including five in *Science*, one in *Nature*, two in *Nature Astronomy*, two in *Nature Communications*, and two in *Nature Geosciences*.
3. My two most recent graduate students (Arredondo & Lowry) were selected to participate in NASA’s Jet Propulsion Laboratory’s Solar System Summer School in 2021 and 2022.
4. I am a Co-Investigator on a \$1 billion proposal to NASA’s New Frontiers Program. This proposal is headed by Cornell University and is called CAESAR: The Comet Astrobiology Exploration Sample Return Mission. The expected deadline for submission is late 2023. We have been working on this proposal for 6 years, we were second out of 14 on the last round of NASA’s New Frontiers program, hence, will be highly competitive for the next round.

5. In 2022, I was selected twice by the State Department's Speakers Program to lecture in Portugal and in Slovakia.
- NOTE: I am puzzled why only Graduate Education in this section? For example, I am very proud of the accomplishments of my undergraduate students, including Honors Undergraduate Theses in 2022, 2020, etc. Three of my students won UCF's SURE in 2020. One of my students received the UCF Summer Undergraduate Research Fellowship (SURF), in 2023.