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Biographical Sketch

Dr. Ádámkovics has extensive experience in astrochemistry, photochemical kinetics, radiative transfer, and spectroscopy. His research objective is to elaborate on the origins of habitable planetary systems. The science goals that support this objective are to understand the distribution and processing of material that exists prior to the formation of planets, as well as the properties of the atmospheres that exist after planet formation is complete. Reaching these goals requires the development of observational and computational modeling tools to plan and interpret measurements made by ground-based telescopes and spacecraft. Within this framework, he explores the thermal-chemical kinetics and radiative transfer of protoplanetary disks and planetary atmospheres.

Professional Appointments

Assistant Researcher	University of California	Berkeley, CA	Astronomy Dept.	2012 -
Project Scientist	University of California	Berkeley, CA	Astronomy Dept.	2010 - 2012
Associate Specialist	University of California	Berkeley, CA	Astronomy Dept.	2009 - 2010

Education

Postdoctoral	University of California	Berkeley, CA	Astronomy Dept.	2005 - 2009
Postdoctoral	University of Illinois	Urbana, IL	Chemistry Dept.	2004 - 2005
Ph.D.	University of California	Berkeley, CA	Chemistry	2004
B.S. <i>Honors</i>	University of Chicago	Chicago, IL	Chemistry	2000

Ph.D. Advisor: Kristie A. Boering, *Thesis:* “Hydrocarbon photochemistry in planetary atmospheres”

Professional Service

- **Guest Editor – *Icarus*** (2015) Solicited manuscripts for publication, assigned scientific reviewers, and made editorial decision on scientific and technical merit of article.
- **NASA ROSES Panel Scientific Review** (undisclosed dates) Evaluated proposals for scientific merit to be Selected by NASA for funding.
- **Science Definition Team - TMT/IRIS** (2009–) Lead member for Solar System science goals development team. Motivated the design requirements for the IR Imaging Spectrograph (IRIS) planned for the Thirty Meter Telescope (TMT).
- **Titan Science Focus Group - JWST** (2014–) Member for Solar System science goals development team, describing key Titan research to be performed with the James Webb Space Telescope (JWST).
- **Science Definition Team - Keck/NGAO** (2008 - 2009) Contributed science design considerations for the Next Generation Adaptive Optics (NGAO) system at the W. M. Keck Observatory.
- **Reviewer - NASA Postdoctoral Program** (2008–) Reviewed applications for the NASA postdoctoral fellowship program, critically evaluating proposed research goals and applicant merit.

Teaching Experience

- 2009 - Astronomy & EPS C12 - The Planets, Instructor
- 2009 - Astronomy 162 - Planetary Astrophysics, Guest Lecturer
- 2008 - Astronomy 162 - Planetary Astrophysics, Guest Lecturer
- 2007 - Astronomy 250 - Graduate Seminar, Co-Instructor
- 2006 - Astronomy & EPS C12 - The Planets, Instructor
- 2002 - Chemistry 125 - Physical Chemistry Lab, Graduate Student Instructor
- 2001 - Chemistry 1A - General Chemistry, Graduate Student Instructor

Student Mentoring

Graduate Co-Mentoring (with Prof. Imke de Pater):

- Katherine de Kleer - Proposed the observational campaign to spectroscopically study Io at IRFT as well as provided critical guidance planning and analyzing observations of Io with Keck NIRSPA0.

Undergraduate:

- John Kodros - Guided honors thesis on software development for automated cloud altitude retrieval on Titan using radiative transfer model.
- Yi-Lin (Eleana) Jao - Guided software development for automated image navigation/centering.

Grants & Funding

NASA Principal-Investigator:

- **NASA PI – NNX15AE24G – \$231,444**
The Photochemistry of Gas and Ice in UV and X-ray Irradiated Disk Atmospheres.
- **NASA PI – NNX14AG82G - \$90,00**
The Methane Humidity on Titan.

UC Berkeley Principal-Investigator:

- **UC Berkeley PI – AST-1517785 - \$104,484**
High Resolution Spectroscopy and Spectro-Astrometry of Warm Gas in Herbig Ae/Be Stars: A Search for Forming Gas Giant Planets.
- **UC Berkeley PI – NNX14AC49A - \$83,485**
Global Redistribution of Condensibles in Protoplanetary Nebula.
- **UC Berkeley PI – NNX12AM81G - \$112,022**
Understanding Titan's Three-Dimensional Dynamic Meteorology and the Role of Atmospheric Waves in Titan's General Circulation using Observations and Modeling.

NSF Co-Investigator:

- **NSF Co-I – ST-1313485 – \$455,532**
A Multi-Wavelength Observing Program of Io Using Adaptive Optics and Interferometric Techniques

References

Jonathan L. Mitchell
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Peer-Reviewed Publications

Summary	Total	First Author
Publications	41	16
Citations	455	156
H-index	12	8

Statistics as of October 27, 2016 via [ADS Bumblebee](#)

- [41] Lora, J. M., & **Ádámkovics, M.** 2017, [Icarus](#), *in press*
- [40] Shepard, M. K., Richardson, J., Taylor, P. A., et al. 2017, [Icarus](#), **281**, 388
- [39] Brittain, S. D., Najita, J. R., Carr, J. S., **Ádámkovics, M.**, & Reynolds, N. 2016, [ApJ](#), **830**, 112
- [38] **Ádámkovics, M.**, & Mitchell, J. L. 2016, [Icarus](#), **275**, 232
- [37] **Ádámkovics, M.**, Mitchell, J. L., Hayes, A. G., et al. 2016b, [Icarus](#), **270**, 376
- [36] Hayes, A. G., Soderblom, J. M., & **Ádámkovics, M.** 2016, [Icarus](#), **270**, 1
- [35] Luszcz-Cook, S. H., de Kleer, K., de Pater, I., **Ádámkovics, M.**, & Hammel, H. B. 2016, [Icarus](#), **276**, 52
- [34] **Ádámkovics, M.**, Najita, J. R., & Glassgold, A. E. 2016a, [ApJ](#), **817**, 82
- [33] Nixon, C. A., Achterberg, R. K., **Ádámkovics, M.**, et al. 2016, [PASP](#), **128**, 018007
- [32] Bjoraker, G. L., Wong, M. H., de Pater, I., & **Ádámkovics, M.** 2015, [ApJ](#), **810**, 122
- [31] de Kleer, K., Luszcz-Cook, S., de Pater, I., **Ádámkovics, M.**, & Hammel, H. B. 2015, [Icarus](#), **256**, 120
- [30] de Pater, I., Davies, A. G., McGregor, A., et al. 2014b, [Icarus](#), **242**, 379
- [29] de Kleer, K., de Pater, I., Davies, A. G., & **Ádámkovics, M.** 2014, [Icarus](#), **242**, 352
- [28] de Pater, I., Davies, A. G., **Ádámkovics, M.**, & Ciardi, D. R. 2014a, [Icarus](#), **242**, 365
- [27] **Ádámkovics, M.**, Glassgold, A. E., & Najita, J. R. 2014, [ApJ](#), **786**, 135
- [26] Barnes, J. W., Clark, R. N., Sotin, C., et al. 2013, [ApJ](#), **777**, 161
- [25] de Kleer, K., de Pater, I., **Ádámkovics, M.**, & Hammel, H. 2013, [Icarus](#), **226**, 1038
- [24] **Ádámkovics, M.**, de Pater, I., & Spinrad, H. 2012, [APSS](#), **342**, 309
- [23] Barnes, J. W., Lemke, L., Foch, R., et al. 2012, [Experimental Astronomy](#), **33**, 55
- [22] Najita, J. R., **Ádámkovics, M.**, & Glassgold, A. E. 2011, [ApJ](#), **743**, 147
- [21] Mitchell, J. L., **Ádámkovics, M.**, Caballero, R., & Turtle, E. P. 2011, [Nature Geoscience](#), **4**, 589
- [20] **Ádámkovics, M.**, Glassgold, A. E., & Meijerink, R. 2011, [ApJ](#), **736**, 143
- [19] de Pater, I., Wong, M. H., de Kleer, K., et al. 2011, [Icarus](#), **213**, 559
- [18] de Pater, I., Wong, M. H., Marcus, P., et al. 2010, [Icarus](#), **210**, 742
- [17] **Ádámkovics, M.**, Barnes, J. W., Hartung, M., & de Pater, I. 2010, [Icarus](#), **208**, 868
- [16] Luszcz-Cook, S. H., de Pater, I., **Ádámkovics, M.**, & Hammel, H. B. 2010, [Icarus](#), **208**, 938
- [15] van Kempen, T. A., Green, J. D., Evans, N. J., et al. 2010, [A&A](#), **518**, L128
- [14] Laver, C., de Pater, I., Marchis, F., **Ádámkovics, M.**, & Wong, M. H. 2009, [Icarus](#), **204**, 574
- [13] Brown, M. E., Smith, A. L., Chen, C., & **Ádámkovics, M.** 2009, [ApJL](#), **706**, L110

- [12] **Ádámkovics, M.**, de Pater, I., Hartung, M., & Barnes, J. W. 2009, *Planet. Space Sci.*, **57**, 1586
- [11] **Ádámkovics, M.**, de Pater, I., Hartung, M., et al. 2008, *JGR (Planets)*, **113**, 2
- [10] **Ádámkovics, M.**, Wong, M. H., Laver, C., & de Pater, I. 2007, *Science*, **318**, 962
- [9] Perron, J. T., Lamb, M. P., Koven, C. D., et al. 2006, *JGR (Planets)*, **111**, 11001
- [8] Witasse, O., Lebreton, J.-P., Bird, M. K., et al. 2006, *JGR (Planets)*, **111**, 7
- [7] de Pater, I., **Ádámkovics, M.**, Bouchez, A. H., et al. 2006, *JGR (Planets)*, **111**, 7
- [6] **Ádámkovics, M.**, de Pater, I., Hartung, M., et al. 2006, *JGR (Planets)*, **111**, 7
- [5] **Ádámkovics, M.**, Blake, G. A., & McCall, B. J. 2005, *ApJ*, **625**, 857
- [4] **Ádámkovics, M.**, de Pater, I., Roe, H. G., Gibbard, S. G., & Griffith, C. A. 2004, *GRL*, **31**, 17
- [3] **Ádámkovics, M.**, Blake, G. A., & McCall, B. J. 2003, *ApJ*, **595**, 235
- [2] McCall, B. J., Casaes, R. N., **Ádámkovics, M.**, & Saykally, R. J. 2003, *Chem. Phys. Lett.*, **374**, 583
- [1] **Ádámkovics, M.**, & Boering, K. A. 2003, *JGR (Planets)*, **108**, 5092

Invited Research Talks

- 2016 Oct - Cornell University Astronomy Colloquium
- 2013 May - NASA Ames Research Center Division Seminar
- 2010 Mar - Caltech Planetary Science Seminar
- 2009 Nov - UC Berkeley Astronomy Colloquium
- 2009 Sep - Keck Science Meeting Near-IR Workshop
- 2009 Jun - American Astronomical Society Meeting
- 2008 May - University of Washington at Seattle Atmospheric Sciences Colloquium
- 2008 May - University of Washington at Seattle Astronomy Colloquium
- 2008 Mar - IGPP Seminar at Lawrence Livermore National Lab
- 2008 Mar - SETI Institute/Carl Sagan Center Colloquium
- 2007 Nov - Center for Adaptive Optics Retreat
- 2007 Sep - UC Berkeley Space Sciences Lab Colloquium
- 2007 Mar - Community College of San Francisco Astronomy Seminar

Invited Public Outreach & Presentations

- 2013 Jun - Chabot Space Science Center Volunteer Enrichment
- 2013 Mar - science@cal Lecture
- 2009 Sep - Mt. Diablo Astronomical Society
- 2007 Oct - Quirks and Quarks - CBC Radio 1 Interview

Contributed Conference Presentations

- [61] Shepard, M. K., Richardson, J. E., Taylor, P. A., et al. 2016, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 48, 510.02
- [60] Drummond, J. D., Conrad, A., Reddy, V., et al. 2016, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 48, 325.23
- [59] Lora, J. M., **Ádámkovics, M.**, & Mitchell, J. L. 2016b, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 48, 520.01
- [58] Corlies, P., Hayes, A., & **Ádámkovics, M.** 2016, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 48, 515.10
- [57] **Ádámkovics, M.**, Lora, J. M., & Mitchell, J. L. 2016, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 48, 515.02
- [56] Bjoraker, G., de Pater, I., Wong, M. H., et al. 2016, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 48, 508.05
- [55] Brittain, S. D., **Ádámkovics, M.**, Carr, J. S., & Najita, J. R. 2016, in American Astronomical Society Meeting Abstracts, Vol. 228, American Astronomical Society Meeting Abstracts, 320.03
- [54] Lora, J., Mitchell, J., & **Ádámkovics, M.** 2016a, in Titan Aeronomy and Climate, 48
- [53] Wong, M. H., Bjoraker, G. L., De Pater, I., & **Ádámkovics, M.** 2015a, AGU Fall Meeting Abstracts
- [52] Bjoraker, G. L., De Pater, I., Wong, M. H., & **Ádámkovics, M.** 2015b, AGU Fall Meeting Abstracts
- [51] Luszcz-Cook, S. H., de Kleer, K., de Pater, I., **Ádámkovics, M.**, & Hammel, H. B. 2015, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 47, 311.03
- [50] **Ádámkovics, M.**, & Mitchell, J. L. 2015, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 47, 205.05
- [49] Wong, M. H., Bjoraker, G. L., de Pater, I., & **Ádámkovics, M.** 2015b, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 47, 403.05
- [48] Nixon, C. A., Achterberg, R., **Ádámkovics, M.**, et al. 2015, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 47, 310.14
- [47] Corlies, P., Hayes, A. G., Rodriguez, S., et al. 2015, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 47, 300.07
- [46] Bjoraker, G., de Pater, I., Wong, M. H., et al. 2015a, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 47, 403.06
- [45] de Kleer, K., De Pater, I., Davies, A. G., & **Ádámkovics, M.** 2014, AGU Fall Meeting Abstracts
- [44] Corlies, P., Hayes, A., Rojo, P., et al. 2014, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 46, 112.06
- [43] Luszcz-Cook, S. H., de Kleer, K., de Pater, I., **Ádámkovics, M.**, & Hammel, H. B. 2014, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 46, 422.18
- [42] Bjoraker, G., de Pater, I., Wong, M. H., & **Ádámkovics, M.** 2014, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 46, 511.04
- [41] **Ádámkovics, M.**, & Mitchell, J. L. 2014, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 46, 112.05

- [40] Wright, S. A., Larkin, J. E., Moore, A. M., et al. 2014, in *Proc. SPIE, Vol. 9147, Ground-based and Airborne Instrumentation for Astronomy V*, 91479S
- [39] De Pater, I., Davies, A. G., **Ádámkovics, M.**, McGregor, A., & Observing Team, G. 2013, AGU Fall Meeting Abstracts
- [38] de Kleer, K., De Pater, I., & **Ádámkovics, M.** 2013a, AGU Fall Meeting Abstracts
- [37] **Ádámkovics, M.**, Hayes, A., Mitchell, J., De Pater, I., & Young, E. 2013b, AGU Fall Meeting Abstracts
- [36] Arias-Young, T. M., Mitchell, J., **Ádámkovics, M.**, & Caballero, R. 2013, AGU Fall Meeting Abstracts
- [35] de Kleer, K. R., de Pater, I., Luszcz-Cook, S., et al. 2013b, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 45, 312.19
- [34] Barnes, J. W., Clark, R. N., Sotin, C., et al. 2013, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 45, 207.01
- [33] BJORAKER, G., de Pater, I., Wong, M. H., **Ádámkovics, M.**, & Hewagama, T. 2013, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 45, 506.03
- [32] **Ádámkovics, M.**, Glassgold, A. E., & Najita, J. R. 2013a, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 45, 415.12
- [31] **Ádámkovics, M.**, Hayes, A. G., & De Pater, I. 2012, AGU Fall Meeting Abstracts
- [30] **Ádámkovics, M.**, & de Pater, I. 2012, in AAS/Division for Planetary Sciences Meeting Abstracts, Vol. 44, 312.11
- [29] Mitchell, J., **Ádámkovics, M.**, Caballero, R., & Turtle, E. 2012, in EGU General Assembly Conference Abstracts, Vol. 14, EGU General Assembly Conference Abstracts, ed. A. Abbasi & N. Giesen, 12725
- [28] Burr, D. M., **Ádámkovics, M.**, Baker, V. R., et al. 2011, AGU Fall Meeting Abstracts, C2
- [27] Mitchell, J., **Ádámkovics, M.**, Caballero, R., et al. 2011a, AGU Fall Meeting Abstracts, C6
- [26] **Ádámkovics, M.**, & de Pater, I. 2011, in EPSC-DPS Joint Meeting 2011, 1700
- [25] **Ádámkovics, M.**, & Mitchell, J. L. 2011, in EPSC-DPS Joint Meeting 2011, 1547
- [24] Mitchell, J. L., **Ádámkovics, M.**, Caballero, R., & Turtle, E. P. 2011b, in EPSC-DPS Joint Meeting 2011, 1675
- [23] Luszcz-Cook, S. H., de Pater, I., **Ádámkovics, M.**, & Hammel, H. B. 2011, in EPSC-DPS Joint Meeting 2011, 1329
- [22] de Kleer, K. R., de Pater, I., Hammel, H., **Ádámkovics, M.**, & Luszcz-Cook, S. 2010, in AAS/Division for Planetary Sciences Meeting Abstracts #42, Vol. 42, 11.32
- [21] **Ádámkovics, M.**, Kodros, J. K., Wong, M. H., et al. 2010, in AAS/Division for Planetary Sciences Meeting Abstracts #42, Vol. 42, 36.26
- [20] Kattenhorn, S. A., Barnes, J. W., McKay, C. P., et al. 2010, in Bulletin of the American Astronomical Society, Vol. 42, AAS/Division for Planetary Sciences Meeting Abstracts #42, 1006
- [19] **Ádámkovics, M.** 2010, in Through Time; A Workshop On Titan's Past, Present and Future, ed. V. Cottini, C. Nixon, & R. Lorenz, 56
- [18] Brown, M. E., Smith, A., Chen, C., & **Ádámkovics, M.** 2009, AGU Fall Meeting Abstracts, C4
- [17] Wong, M. H., **Ádámkovics, M.**, Benecchi, S., et al. 2009, in AAS/Division for Planetary Sciences Meeting Abstracts #41, Vol. 41, 16.09

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