ERIC GAIDOS – CURRICULUM VITAE

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Academic Appointments:

2010-present	Professor of Geobiology, Department of Geology and Geophysics School of Ocean and Earth Sciences and Technology University of Hawaii at Manoa
2005-2010	Associate Professor of Geobiology
2001-2005	Assistant Professor of Geobiology

Visitor and Sabbatical Positions:

2016 May-July: Visiting Professor, Center for Space & Habitability, University of Bern
2015 April-August: Visiting Scientist, Observatoire de Genéve, Sauverny, Switzerland
2015 March-August: Visiting Scientist, Center for Astrophysics, Harvard University
2015 March-August: Visiting Scientist, Institut for Theoretical Astrophysics, Heidelberg
2015 Feb.-March: Visiting Scientist, Kavli Institute for Physics, UC Santa Barbara
2014 July–2015 Jan: Visiting Scientist, Max Planck Institut für Astronomie, Heidelberg
2011 May-Nov.: Astrobiology Chair, Pufendorf Institute for Advanced Studies, Lund U. 2007 August-Dec.: Visiting Scholar, Dept. of Earth & Planetary Sciences, UC Berkeley
2005 October: Visiting Scientist, Centre de Recherche Astrophysique de Lyon
1990 June-August: Visiting Student, Ecole Polytechnique Federal de Lausanne
1988 Sept.-1989 Aug.: Stagiare, Centre national d'Etudes Spatiales, Toulouse

Education and Training:

1997-2001: Postdoctoral Fellow, Caltech Jet Propulsion Laboratory
1996-1997: Postdoctoral Fellow, MIT Center for Space Research
1996: Ph.D., Physics, MIT
Dissertation title: *Paleocosmology: Observational Constraints on the Evolution of Galaxies and Large-scale Structure*
1991: M.S., Aeronautical & Astronautical Engineering, MIT
1988: B.S. (Honors), Applied Physics, Caltech

Foreign Languages

Competence in French and Spanish; experience in German and Russian.

Current Instructional Portfolio

Geology & Geophysics 101 *The Voyage of the Vicariance, A Geography of Time*: This is an undergraduate introductory course on Earth history that I developed in 2006 and have taught about once a year. The course, inspired by Charles Darwin's journey on the HMS *Beagle*, is structured as an imaginary sailing voyage around the world. Each lecture takes place at a different port of call where the human and physical geography is described and connected to local geology as well as global Earth processes. The voyage" also takes the students backwards

from the end of the last Ice Age to the formation of Earth, and at each step they are acquainted with increasingly distant relatives on the Tree of Life, from *Homo neanderthalis* to the Bacteria.

Geology & Geophysics 669 *Origins of Solar Systems*: This is an a graduate-level class that I have taught three times. It addresses questions at the forefront and interface of the Earth, space and life sicences: How did the Earth and other planets form? How common are planets around other stars, and what are their properties? Can other planets support life and how would we detect it? Material in this course was presented through the three observational "windows" through which almost everything has been learned in this field: measurements of early events recorded in Solar System bodies and materials; astronomical observations of the process of star and planet formation; and characterization of planets around other stars. Students wrote a *Science*-like "Perspective" paper on a recent peer-reviewed paper of their choice or a review paper that was published in a peer-review journal.

Geology & Geophysics 711 *Science Writing and Documentary Film-making*: This advanced graduate class provides a hands-on introduction of students to the fundamentals of communicating science to a broader audience, i.e. the non-specialist scientis or the general public, through print and video media. In one of the classes, the students developed a 20-minute video introduction on the natural history of the Hawaiian Islands, intended for visitors: https://vimeo.com/63803633

Student and Postdoctoral Supervision:

Doctoral students: Sam Grunblatt (2016-), Larissa Nofi (2015-2016), Megan Ansdell (2013-2014), Andrew W. Mann (2009-2013, now NASA Hubble postdoctoral fellow at the University of Texas at Austin), Nicholas Moskovitz (2004-2009, now staff scientist at Lowell Observatory), Angelos Hannides (2002-2007, now Assistant Professor, Coastal Carolina University)

Masters students: Jillian Ward (2005-2008), Justin Troyer (2009)

Undergradate students: Maxime Grand (senior thesis, 2002-2003), Alix Axmann (senior thesis, 2004-2005), Sean Otaga (senior thesis, 2006-2007), Whitney Hassett (senior thesis, 2006-2007), Daniel Rogers (NASA Space Grant Scholar, 2006-2007), Nelson Lazaga (NASA Space Grant Scholar, 2007), Melissa Ilard (Summer intern, 2009)

Postdocs: Ketil Sorensen (2004-2006, now staff scientist at Technical University of Denmark), Evgenya Shkolnik (2005-2006, now assistant professor at Arizona Staet University), Antje Rusch (2006-2008, now assistant professor at Southern Illinois University), Eric J. Hilton (2011-2012, now Universe Sandbox), Joost van Summeren (2011-2012, now at KWR Watercycle Research Institute), Knicole D. Colon (2012-2013, now NASA *Kepler* mission scientist).

Organizational Activities:

Member, *Transiting Exoplanet Survey Satellite Science Working Groups on Follow-Up and Atmospheric Characterization* (2014-)

Member, *International Science Definition Team for Exoplanets*, Thirty Meter Telescope Project (2014-)

Member, *NASA Kepler Mission Stellar Parameters Working Group*, (2012-)

Session co-organizer, *M Dwarfs in the Light of Exoplanets*, Cool Stars 17, Barcelona, Spain (June 2012)

Workshop convenor, *Transiting Planets in the House of the Sun - A Workshop on M Dwarf Stars and Their Planets*, Maui, USA (May 2012)

Co-crganizer *Symposium on Enigmas of Evolution*, Pufendorf Institute for Advanced Studies, Lund, Sweden (October 2011)

Co-organizer, and co-chair *Exoplanets for Planetary Scientists Workshop,* University of Central Florida, Orlando, USA (December 2010)

Member, *Limits and Evolution of Life on Earth and Beyond*, IODP Science Working Group (2009)

Co-organizer and co-chair, *Hot Earths: formation, detection, and structure*, American Astronomical Society Meeting, Honolulu, USA (May 2007)

Member, *NASA/JPL Michelson Fellowship Committee* (2007)

Co-chair, Geology and habitability of Terrestrial Planets, International Space Science Institute, Bern, Switzerland (September 2005)

Science Organizing Committee, *NASA Astrobiology Institute Biannual Meeting*, Boulder, USA (April 2005)

Science Organizing Committee, *2nd TPF/Darwin Meeting*, San Diego, USA (July 2004)

Science Organizing Committee, *Bioastronomy*, Reykjavik, Iceland (July 2004)

Co-organizer and co-chair, *The Dawn of Animal Life*, Joint US National Academy of Sciences - Chinese Academy of Sciences Workshop, Shanghai, China (October 2003)

Member, *NASA/JPL Terrestrial Planet Finder Science Working Group* (2002-2006)

Organizer and chair, *Information, Regulation, and Evolution of Cells*, Gordon Research Conference on the Origin of Life, Ventura, USA (January 2002)

Co-organizer and co-chair, *Biogeochemical evolution of the Phanerozoic ocean* and *Bridging the gap: From molecular biology to marine ecology*, AGU/ASLO Ocean Sciences Meeting, Honolulu, USA (February 2002)

Co-organizer and co-chair, *New paradigms for the Mars water cycle*, AGU Fall meeting, San Francisco, USA (December 2001)

Extramural Funding Awards

Sloan Foundation Deep Carbon Observatory, Census for Deep Life, *Ice-Covered Icelandic Crater Lake Ecosystem Study*, PI, $25,000, 5/1/2015-7/31/2015

NASA Origins of Solar Systems, *A combined Doppler and photometric search for signpost planets around M dwarf stars*, PI, $373,445, 1/1/2011-12/31/2016

NASA Astrobiology: Exobiology and Evolutionary Biology, *Formation, evolution, and detection of planets close to cool stars*, PI, $357,063, 8/3/2010-8/2/2015

NSF Astronomy and Astrophysics, Collaborative Research: *Targets for planets: a database of nearby stars suitable for exoplanet surveys*, co-PI, $174,722, 2009-2012

NASA Astrobiology Institute Director's Discretionary Fund, *Diversity, phylogeny, and genetics of the basal metazoan Trichoplax adhaerens*, PI, $50,000, 2006-2007

NASA Graduate Student Research Program, Physical and chemical processes in the atmospheres of planetary embryos, PI, $75,000, 2006-2009

NASA Terrestrial Planet Finder Foundation Science, Observable signatures of extreme seasonality on Earth-like planets with high orbital eccentricity or high obliquity, PI, $249,426, 2004-2007

NASA Newton/XMM Telescope Observing Support, *The Nature of the Flaring Companion to HD 43162*, Co-I, $36,400, 2004-2005

NASA Astrobiology Institute Cooperative Agreement Notice – 3, *The Origin, History, and Distribution of Water and its Relation to Life in the Universe*, co-I, $5,171,596, 2003-2008

NSF Biogeosciences, *Microcosm Investigations of Carbonate Reef Microbial Biogeochemistry*, PI, $79,948, 2003-2004

UH University Research Council, *Microbiology of Methane and Nitrous Oxide Production in the Ka'au Crater Wetland*, O'ahu, Hawai'i, PI, $7,000, 2002-2003

NSF Biocomplexity in the Environment, Coupled Biogeochemical Cycles, Cycles of Carbon and Nitrogen in an Ice-covered Volcanic Crater Lake, PI, $98,456, 2001-2003.

96. Grunblatt, S. K., Huber, D., Gaidos, E., Lopez, E., Fulton, B., Fortney, J., Howard, A., Sinukoff, E., Mann, A., Isaacson, H. (2016) EPIC 211351816.01: A (Re-?) Inflated Planet Orbiting a Red Giant Star, submitted to The Astrophysical Journal.

95. **Gaidos, E.**, Mann, A. W., Rizzuto, A. C., Nofi, L., Mace, G., Vanderburg, A., Feiden, G., Esposito, T. M., De Rosa, R. J., Graham, J. R., Ansdell, M., Kraus, A., Jaffe, D. (2016) Zodiacal Exoplanets in Time (ZEIT) II: A Close-In "Super-Earth" around an Enigmatic Young K Dwarf in the Pleiades Field, submitted to Monthly Notices of the Royal Astronomical Society.

94. Ansdell, M., **Gaidos, E.**, Williams, J. P., Kennedy, G., Wyatt, M. C., LaCourse, D. M., Jacobs, T. L., Mann, A. W. (2016) Dippers are not inclined toward edge-on orbits, submited to Letters of the Monthly Notices of the Royal Astronomical Society.

93. Mann, A. W., Newton, E. R., Rizzuto, A. C., Irwin, J., Feiden, G. A., **Gaidos, E.**, Mace, G. N., Kraus, A. L., James, D. J., Ansdell, M., Charbonneau, D., Covey, K. R., Ireland, M. R., Jaffe, D. T., Johnson, M. C., Kidder, B., Vanderburg, A. (2016) Zodiacal Exoplanets in Time (ZEIT) III: A Neptune-sized planet orbiting a pre-main-sequence star in the Upper Scorpius OB Association, The Astrophysical Journal, in press.

92. Kite, E., Fegley, B., Schaefer, L., **Gaidos, E.** (2016) Atmosphere-interior exchange on hot, rocky exoplanets", The Astrophysical Journal, in press.

91. Mann, A. W., **Gaidos, E.**, Mac, G., Johnson, M., Bowler, B., LaCourse, D., Jacobs, T., Vanderburg, A., Kraus, A., Kaplan, K., Jaffe, D. (2015) Zodiacal Exoplanets In Time (ZEIT)-I: A Neptune-sized planet orbiting an M4.5 dwarf in Hyades, The Astrophysical Journal, 818, 46.

90. Hirano, T., Fukui, A., Mann, A. W., Sanchis-Ojeda, R., **Gaidos, E.**, Narita, N., Dai, F., Van Eylen, V., Lee, C.-H., Onozato, H., Ryu, T., Kusakabe, N., Ito, A., Kuzuhara, M., Onitsuka, M., Tatsuuma, M., Nowak, G., Palle, E., Ribas, I., Tamura, M., Yu, L. (2015) ESPRINT III: A close-in super-Earth around a metal-rich mid-M dwarf, The Astrophysical Journal, 820, 41.

89. **Gaidos, E**., Mann, A. W., Ansdell, M. (2015) The enigmatic and ephemeral M dwarf system KOI 6705: Cheshire cat or wild goose?, The Astrophysical Journal, 817, 50.

88. Ansdell, M., **Gaidos, E.**, Rappaport, S. A., Jacobs, T. L., LaCourse, D. M., Jek, K. J., Mann, A. W., Wyatt, M. C., Kennedy, G., Williams, J. P., Boyajian, T. S. (2015): Young M dwarf "dipper" stars in Upper Sco and rho Oph observed by K2, The Astrophysical Journal, 816, 69.

87. **Gaidos, E.**, Mann, A. W., Kraus, A. L., Ireland, M. (2016): They are small worlds after all: Revised properties of *Kepler* M dwarf stars and their planets, Monthly Notices of the Royal Astronomical Society, 457, 2877.

86. Sanchis-Ojeda, R., Rappaport, S., Palle, E., Delrez, L., DeVore, J., Gandolfi, D., Fukui A., Ribas, I., Stassun, K. G., Albrecht, S., Dai, F., **Gaidos, E.**, Gillon, M., Hirano, T., Holman, M., Howard, A. W., Isaacson, H., Jehin, E., Kuzuhara, M., Mann, A. W., Marcy, G. W., Miles-Paez, P. A., Montanes-Rodriguez, P. A., Murgas, F., Narita, N., Nowak, G., Onitsuka, M., Paegert, M.,

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Van Eylen, V., Winn, J. N., Yu, L. (2015): The K2-ESPRINT project I: Discovery of the disintegrating rocky planet with a cometary head and tail EPIC 201637175b, The Astrophysical Journal, 812, 112.

85. **Gaidos, E.** (2015) What are little worlds made of? Stellar abundances and the building blocks of planets. The Astrophysical Journal 804, 40-53.

84. Mann, A. W., Feiden, G. A., **Gaidos, E.**, Boyajian, T., von Braun, K. (2015) How to constrain your M dwarf: measuring effective temperature, bolometric luminosity, mass and radius. The Astrophysical Journal 804, 64-101.

83. Muirhead, P. S., Mann, A. W., Vanderburg, A., Morton, T. D., Kraus, A., Ireland, M., Swift, J. J., Feiden, G. A., **Gaidos, E.**, Gazak, J. Z. (2015) KOI-2704, KOI-2842, and the occurrence of compact multiples orbiting mid-M dwarf stars. The Astrophysical Journal 801, 18-32.

82. Silburt, A., **Gaidos, E.**, Wu, Y. (2015) A statistical reconstruction of the planet population around *Kepler* solar-type stars. The Astrophysical Journal 799, 180-191.

81. Ansdell, M., **Gaidos, E.**, Mann, A. W., Lepine, S., James, D., Buccino, A., Baranec, C., Law, N. M., Riddle, R., Mauas, P. (2015) The near-ultraviolet luminosity function of early M-type dwarf stars. The Astrophysical Journal **798**, 41-57.

80. **Gaidos, E.**, Mann, A. W. (2014) M dwarf metallicities and giant planet occurrence: ironing out uncertainties and systematics. The Astrophysical Journal 791, 54-62.

79. **Gaidos, E.**, Mann, A. W., Lepine, S., Buccino, A., James, D., Ansdell, M., Petrucci, R., Mauas, P., Hilton, E. J. (2014) Trumpeting M Dwarfs with CONCH-SHELL: a Catalog of Nearby Cool Host-Stars for Habitable ExopLanets and Life. Monthly Notices of the Royal Astronomical Society 443, 2561-2578.

78. Mann, A. W., Deacon, N. R., **Gaidos, E.**, Ansdell, M., Brewer, J. M., Liu, M. C., Magnier, E. A., Aller, K. M. (2014) Prospecting in ultracool dwarfs: measuring the metallicities of late M dwarfs, The Astronomical Journal 147, 160-170.

77. Huber, D., Matthews, J. M., Pinsonneault, M. H., Aguirre, V. S., **Gaidos, E.**, Garcia, R. A., Hekker, S., Mathur, S., Mosser, B., Benoit, T., Guillermo, B., Fabienne, A., Basu, S., Bedding, T. R., Chaplin, W. J., Demory, B.-O., Fleming, S. W., Guo, Z., Mann, A. W., Rowe, J. F., Serenelli, A. M., Smith, M. A., Stello, D. (2014) Revised stellar properties of *Kepler* targets for the Quarter 1-16 transit detection run. The Astrophysical Journal Supplement Series 211, 2-19.

76. **Gaidos, E.**, Anderson, D. R., Lepine, S., Colon, K. D., Maravelias, G., Narita, N., Chang, E., Beyer, J., Fukui, A., Armstrong, J. D., Zezas, A., Fulton, B. J., Mann, A. W., West, R. G., Faedi, F. (2014) Prowling a sea of noise for transits: A Search for Exoplanets by Analysis of WASP Optical Lightcurves and Follow-up (SEAWOLF). Monthly Notices of the Royal Astronomical Society 437, 3133-3143.

75. Mann, A. W., **Gaidos, E.**, Ansdell, M. (2013) Spectro-thermometry of M dwarfs and their candidate planets: too hot, too cool, or just right? The Astrophysical Journal 779, 188-202.

74. Colon, K. D., **Gaidos, E.** (2013) Narrow *K*-band observations of the GJ 1214 system. The Astrophysical Journal **776**, 49-61.

73. **Gaidos, E.**, Fischer, D. A., Mann, A. W., Howard, A. W. (2013) An understanding of the shoulder of giants: Jovian planets around late K dwarf stars and the trend with stellar mass. The Astrophysical Journal 771, 18-29.

72. Mann, A. W., **Gaidos, E.**, Kraus, A., Hilton, E. J. (2013) Testing the metal of late-type Kepler planet hosts with iron-clad methods. The Astrophysical Journal 770, 43-50.

71. Sinukoff, E., Fulton, B., Scuderi, L., **Gaidos, E.** (2013) Below One Earth: Detection, formation, and properties of subterrestrial worlds. Space Science Reviews 180, 71-99.

70. Rusch, A., **Gaidos, E.** (2013) Nitrogen-cycling bacteria and archaea in the carbonate sediment of a coral reef. Geobiology 11, 472-484.

69. **Gaidos, E.** (2013) Candidate planets in the habitable zones of Kepler stars. The Astrophysical Journal 770, 90-101.

68. van Summeren, J., **Gaidos, E.**, Conrad, C. P. (2013) Magnetodynamo lifetimes for rocky, Earth-mass exoplanets with contrasting mantle convection regimes. Journal of Geophysical Research-Planets 118, 938-951.

67. Lepine, S., Hilton, E. J., Mann, A. W., Wilde, M., Rojas-Ayala, B., Cruz, K. L., **Gaidos, E.** (2013) A spectroscopic catalog of the brightest (J<9) M dwarfs in the northern sky. The Astronomical Journal 145, 102-130.

66. Mann, A. W., Brewer, J., **Gaidos, E.**, Hilton, E. J., Lepine, S. (2012) Prospecting in late-type dwarfs: Techniques to determine metallicities of late-K to mid-M dwarfs using infrared and optical spectra. The Astronomical Journal **145**, 52-66.

65. **Gaidos, E.**, Mann, A. W. (2012) Objects in Kepler's mirror may be larger than they appear: bias and selection effects in transiting planet surveys. The Astrophysical Journal **761**, 41-53.

64. Krot, A.N., Makide, K., Nagashima, K., Huss, G.R., Ogliore, R.C., Ciesla, F.J., Yang, L., Hellebrand, E., **Gaidos, E.** (2012) Heterogeneous distribution of Al-26 at the birth of the solar system: evidence from refractory grains and inclusions. Meteoritics and Planetary Science **47**, 1948-1979.

63. Johnson, B. C., Lisse, C. M., Chen, C. H., Melosh, H. J., Wyatt, M. C., Thebault, P., Henning, W. G., **Gaidos, E. J.**, Elkins-Tanton, L. T., Bridges, J. C., Morlok, A. (2012) A self-consistent model of the circumstellar debris created by a giant hypervelocity impact in the HD172555 system. The Astrophysical Journal **761**, 45-57.

62. Nittler, L., **Gaidos, E.** (2012) Galactic chemical evolution and the oxygen isotopic composition of the Solar System. Meteoritics & Planetary Science 47, 2031-2048.

61. Mann, A. W., **Gaidos, E.**, Lepine, S., Hilton, E. (2012) They might be giants: luminosity class, planet occurrence, and planet-metallicity relation of the coolest Kepler target stars. The Astrophysical Journal 753, 90-103.

60. Marteinsson, V., Runarsson, A., Stefansson, A., Thorsteinsson, T., Johannesson, T., Magnusson, S., Reynisson, E., Einarsson, B., Wade, N., Morrison, H., **Gaidos. E.** [corresponding author] (2012) A pervasive microbial community in waters under the Vatnajokull ice cap, Iceland. The International Society for Microbial Ecology Journal 7, 427-437.

59. **Gaidos, E.**, Fischer, D. A., Mann, A. W., Lepine, S. (2012) On the nature of small planets around the coolest Kepler stars. The Astrophysical Journal 746, 36-44.

58. Fischer, D. A., **Gaidos, E.**, Howard, A., Giguere, M., Johnson, J.A., Marcy, G. W., Wright, J. T., Clubb, K. I., Isaccson, H., Apps, K., Lepine, S., Mann, A., Moriarty, J., Brewer, J., Spronck, J., Schwab, C., Szymkowiak, A. (2011) M2K: II. A triple-planet system orbiting HIP 57274. The Astrophysical Journal 745, 21-28.

57. Kite, E. S., **Gaidos, E.**, Manga, M. (2011) Climate instability on tidally-locked exoplanets. The Astrophysical Journal **7**43, 41-52.

56. Lepine, S., **Gaidos, E.** (2011) An all-sky catalog of bright M dwarfs. The Astronomical Journal 142, 138-152.

55. van Summeren, J., Conrad, C. P., **Gaidos, E.** (2011) Mantle convection, plate tectonics, and volcanism on hot exo-Earths. The Astrophysical Journal 736, L15-L20.

54. Mann, A., **Gaidos, E.** (2011) Sub-millimagnitude photometry with ground-based, snapshot observations of bright stars. Publications of the Astronomical Society of the Pacific 123, 1273-1289.

53. Moskovitz, N., **Gaidos, E.** (2011) Differentiation of planetesimals and the thermal consequences of melt migrations in the early Solar System. Meteoritics and Planetary Science 46, 903-918.

52. Pierrehumbert, R., **Gaidos, E.** (2011) Hydrogen greenhouse planets beyond the habitable zone. The Astrophysical Journal 734, L13-L17.

51. Makide, K, Nagashima, K., Krot, A. N., Huss, G. R., Cisela, F. J., Hellebrand, E., **Gaidos, E.**, Yang, L. (2011) Heterogeneous distribution of Al-26 at the birth of the Solar System. The Astrophysical Journal 733, L31-L35.

50. **Gaidos, E.**, Rusch, A., Ilardo, M. (2011) Ribosomal tag pyrosequencing of DNA and RNA

from benthic coral reef microbiota: community spatial structure, rare members, and nitrogen-cycling guilds. Environmental Microbiology 13, 1138-1152.

49. Mann, A. W., **Gaidos, E.**, Gaudi, B. S. (2010) The invisible majority? Evolution and detection of outer planetary systems without gas giants. The Astrophysical Journal 719, 1454-1469.

48. **Gaidos, E.**, Conrad, C. P., Manga, M., Hernlund, J. (2010) Thermodynamic constraints on rocky exoplanet dynamos. The Astrophysical Journal 718, 596-609.

47. Apps, K., Clubb, K., Fischer, D., **Gaidos, E.**, Johnson, J. A., Howard, A., Marcy, G. W., Isaacson, H., Giguere, M., Valenti, J. A., Rodriguez, V., Chubak, C., Lepine, S. (2010) M2K: I. A Jupiter-mass planet orbiting the M3V star HIP 79431. Publications of the Astronomical Society of the Pacific 122, 156-161.

46. **Gaidos, E.**, Krot, A. N., Huss, G. R. (2009) On the oxygen isotopic composition of the Solar System. The Astrophysical Journal 705, L163-L167.

45. Kite E. S., Manga, M., **Gaidos, E.** (2009) Geodynamics and rate of volcanism on massive Earth-like planets. The Astrophysical Journal 700, 1732-1749.

44. Grand, M., **Gaidos, E.** (2009) Patterns of methane emission from a tropical wetland in Ka'au Crater, O'ahu, Hawai'i. Pacific Science 64, 57-72.

43. Moskovitz, N. A., **Gaidos, E.**, Williams, D. M. (2009) The effects of lunar-like satellites on the orbital infrared light curves of Earth-analog planets. Astrobiology 9, 269-277.

42. **Gaidos, E.**, Krot, A. N., Williams, J. P., Raymond, S. N. (2009) Al-26 and the formation of the Solar System from a molecular cloud contaminated by Wolf-Rayet winds. *T*he Astrophysical Journal 696, 1854-1863.

41. **Gaidos, E.**, Marteinsson, V., Thorsteinsson, T., Johannesson, T., Rafnsson, A. R., Stefansson, A., Glazer, B., Lanoil, B., Skidmore, M., Han, S., Miller, M., Rusch, A., Foo, W. (2008) An oligarchic microbial assemblage in the anoxic bottom waters of a volcanic subglacial lake. The International Society for Microbial Ecology Journal 3, 486-497.

40. Rusch, A., Hannides, A. K., **Gaidos, E.** (2008) Diverse communities of active Bacteria and Archaea along oxygen gradients in coral reefs sediments. Coral Reefs 28, 15-26.

39. Moskovitz, N. A., Jedicke, R., **Gaidos, E.** (2008) The distribution of basaltic asteroids in the main belt. Icarus 198, 77-90.

38. Thorsteinsson, T., Elefsen, S. O., **Gaidos, E.**, Lanoil, B., Johannesson, T., Kjartansson, V., Marteinsson, V. Th., Stefansson, A., Thorsteinsson, T. (2008) A hot water drill with built-in sterilization: design, testing and performance. Jokull 57, 71-82.

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37. Moskovitz, N. A., Lawrence, S., Jedicke, R., Willman, M., Haghighipour, N., Bus, Schelte, J., **Gaidos, E.** (2008) A spectroscopically unique Main Belt asteroid: 10537 (1991 RY16), *The Astrophysical Journal* 682, L57-L60

36. Williams, D. M., **Gaidos, E.** (2008) Detecting the glint of starlight on the oceans of distant planets. *Icarus* 195, 927-937.

35. Sorensen, K. B., Glazer, B., Hannides, A., **Gaidos, E.** (2007): Spatial structure of the microbial community in sandy carbonate sediment. Marine Ecology Progress Series 346, 61-74.

34. **Gaidos, E.**, Dubuc, T., Dunford, M., McAndrew, P., Padilla-Gamino, J., Studer, B., Stanley, S. (2007) The Precambrian emergence of animal life: a geobiological perspective. Geobiology 5, 351-373.

33. Johannesson, T., Thorsteinsson, T., Stefansson, A., **Gaidos, E. J.,** Einarsson, B. (2007) Circulation and thermodynamics in a subglacial geothermal lake under the Western Skafta cauldron of the Vatnajokull ice cap, Iceland. Geophysical Research Letters 34, L19502-L19507.

32. **Gaidos, E.**, Glazer, B., Harris, D., Heshiki, Z., Jeppsson, N., Miller, M., Thorsteinsson, T., Bergur, E., Kjartansson, V., Stefansson, A., Quinn de Camargo, L. G., Johannesson, T., Roberts, 31. M., Skidmore, M., Lanoil, B. (2007) A simple sampler for subglacial water bodies. Journal of Glaciology 53, 157-158.

30. **Gaidos, E.**, Haghighipour, N., Agol, E., Latham, D., Raymond, S., and Rayner, J. (2007) New worlds on the horizon: Earth-sized planets close to other stars, Science 318, 210-213.

29. Williams, J. P., **Gaidos, E.** (2007) On the likelihood of supernova enrichment of protoplanetary disks. The Astrophysical Journal 663, L33-L36.

28. Bertaux, J.-L., Carr, M., Des Marais, D., **Gaidos, E.** (2007): Conversations on the habitability of worlds: the importance of volatiles. Space Science Reviews 129, 123-165.

27. **Gaidos, E.**, Selsis, F. (2007) From protostars to protolife: the emergence and maintenance of lifel In: Protostars and Protoplanets V, Eds: B. Reipurth, D. Jewitt, K. Keil (University of Arizona Press, Tucson), 929-944.

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