Yohai Kaspi

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Research Interests: Geophysical fluid dynamics; general circulation of atmospheres and oceans; climate dynamics; dynamics of giant planet atmospheres and interiors; gravity science; atmospheric occultations.

Education

Postdoc	**Atmospheric Dynamics** California Institute of Technology, Pasadena, CA	2008-2011
Ph.D.	**Physical Oceanography** Massachusetts Institute of Technology (MIT), Cambridge, MA, and Woods Hole Oceanographic Institution (WHOI), Woods Hole, MA, Joint Program	2008
M.Sc.	**Physics** Weizmann Institute of Science (WIS), Rehovot, Israel	2002
B.Sc.	**Physics and Mathematics** Hebrew University, Jerusalem, Israel	2000

Professional Appointments

- Professor, Weizmann Institute of Science 2022 - present
- Associate Professor, Weizmann Institute of Science 2017 - 2022
- Assistant Professor, Weizmann Institute of Science 2011 - 2017

Professional Activities

- Chair, Weizmann Institute Helen Kimmel Center for Planetary Science
- Chair, Weizmann Institute Postdoctoral Training Program
- Chair, American Meteorological Society's Atmosphere & Ocean Fluid Dynamics (AOFD) committee
- Co-PI, 3GM instrument for ESA's JUICE mission to Jupiter and the Galilean satellites
- Co-I, NASA Juno mission to Jupiter

Honors

- Japanese Society for the Promotion of Science (JSPS) Visitors Scholar Fellowship 2018
- Princeton GFDL Visitors Scholar Fellowship 2017
- Weizmann Institute Scientific Council Prize of Excellence 2017
- EU Marie Curie Award 2012
- NASA Group Achievement Award, Juno Science Team 2012
- NOAA Climate and Global Change Postdoctoral Award Fellowship 2008
- Teaching Excellence Award, MIT 2007
- Charney Prize, MIT 2003
- MIT Presidential Fellowship 2002

Teaching

- The global circulation of the atmosphere, WIS — Spring 2015, Spring 2019
- Global warming debates, WIS — Fall 2013
- Atmospheric and oceanic baroclinic instability theory, WIS & IUI Eilat — Spring 2013
- Atmospheric and oceanic fluid dynamics, WIS — Fall 2012, Fall 2015, Fall 2018, Fall 2020, Fall 2022
- Turbulence in the oceans and atmospheres, WIS — Fall 2016
- Planetary Climate, WIS — Spring 2022

Service

- Co-Organizer of the Latsis Symposium on Atmosphere and Climate Dynamics: From Clouds to Global Circulations, Zurich, Switzerland, June 2014.
- Co-Organizer of the GFD Days Symposium, Sde Boqer, Israel, 2015, 2016, 2017, 2019 & 2022.
- Co-Organizer of Stormtracks 2018: Perspectives on storm tracks in a changing climate, Uto, Sweden, August, 2018.
- Organizer of AMS Atmospheres and Oceans Fluid Dynamics meeting, USA, 2022.
- Organizer of Departmental seminar, Earth and Planetary Sciences, WIS, 2011-2019.
- Weizmann Institute Scientific Appointments Committee (V9). 2019 - 2022
- Peer-review journal reviewer: Nature, Science, PNAS, Nature Geoscience, Nature Climate Change, Nature Astronomy, Nature Communications, Icarus, Geophysical Research Letters, The Astrophysical Journal, Fluid Dynamics Research, Journal of the Atmospheric Sciences, Quarterly Journal of the Royal Meteorological Society, Journal of Climate, Journal of Geophysical Research, Journal of Hydrometeorology, Climate Dynamics, Planetary and Space Science, Monthly Notices of the Royal Astronomical Society, Physics of the Earth and Planetary Interiors.
- Grant reviewer: ERC-STG, NERC, NASA Outer Planets program, NASA Solar Systems Research Programs, NSF, Israeli Science Foundation, German-Israeli Science Foundation, Leverhulme Trust, Deutsche Forschungsgemeinschaft, Pazi Foundation, Swiss National Science Foundation.

Students and Postdocs supervised

MSc

- Rei Chemke — 2012-2014
  Thesis title: Poleward migration of eddy-driven jets.
- Ilai Guendelman — 2015 - 2017
  Thesis title: Hadley cell dynamics over a wide range of orbital parameters.
- Keren Duer — 2016 - 2018
  Thesis title: The interaction between Jupiter's magnetic field its atmospheric flows.
- Dana Raiter — 2018 - 2020
  Topic: The Longitudinal dependence of the Hadley circulation
- Or Hadas — 2018 - 2020
  Topic: Storm track dynamics
- Maayan Ziv — 2022 - present
  Topic: Giant planet interior dynamics
- Erez Aviv — 2022 - present
  Topic: Jet-stream dynamics

PhD

- Talia Tamarin-Brodsky 2012-2017
  Thesis title: The poleward deflection of midlatitude storm tracks and its variation under climate change.
  Current position: Assistant Professor, MIT
- Rei Chemke 2014-2017
  Thesis title: The latitudinal dependence of geostrophic turbulence in the atmosphere.
  Current position: Assistant Professor, Weizmann Institute
- Janni Yuval 2013-2017
  Thesis title: Sensitivity of atmospheric turbulence to the spatial structure of baroclinicity: implications for storm tracks and climate change.
  Current position: EAPS Distinguished Postdoctoral fellow, MIT
- Hilla Afargan-Gerstman 2012-2018
  Thesis title: The seasonal cycle of storm track eddies.
  Current position: Postdoctoral fellow, ETH Zurich
- Ilai Guendelman 2017 - 2022
  Thesis topic: Seasonal variation of planetary climate
  Current position: Postdoctoral fellow, Princeton University
- Keren Duer 2018 - present
  Thesis topic: Giant planet dynamics
- Nimrod Gavriel 2019 - present
  Thesis topic: Geophysical vortices
- Maria Smirnova 2020 - present
  Thesis topic: Atmospheric radio-occultations
- Or Hadas 2020 - present
  Topic: Storm track dynamics

Postdoc

- Marzia Parisi 2014-2016
  Research topic: Determining the depth of Jupiter's Great Red Spot with Juno's gravity measurements
  Current position: Research scientist, Jet Propulsion Laboratory
- Morgan E. O'Neill 2015-2017
  Research topic: Convection on fluid planets
  Current position: Assistant Professor, Stanford University
- Meir Zeilig-Hess 2021-present
  Research topic: Tropical cyclones

Publications

Bold face denotes members of the Kaspi Research group

94. **Guendelman, I.** and **Y. Kaspi**, 2022, The influence of the meridional atmospheric heat transport on the surface temperature seasonal cycle, *AGU Advances*, in revision.
93. Blanco J. A., R. Caballero, G. Datseris, B. Stevens, S. Bony, **O. Hadas** and **Y. Kaspi**, 2022, Understanding hemispheric cloud albedo asymmetry from a cloud-controlling factor perspective, *J. Climate*, Submitted.
92. Okajima S., H. Nakamura and **Y. Kaspi**, 2022, Distinct roles of cyclones and anticyclones in setting the midwinter minimum of the North Pacific eddy activity. Part I: Lagrangian perspective, *J. Climate*, Submitted.

91. **Raiter D., E. Galanti,** R. Chemke and **Y. Kaspi**, 2022, Future tropical precipitation changes are dominated by a large-scale meridional circulation shift, Submitted.

90. Durante D., T. Guillot, L. Iess, D. J. Stevenson, C. R. Mankovich, S. Markham, **E. Galanti**, **Y. Kaspi**, M. Zannoni, L. Gomez Casajus, G. Lari, M. Parisi, D. R. Buccino, R. S. Park, S. J. Bolton, 2022, Evidence for Jupiter's normal modes from Juno gravity measurements, *Nature Communications*, in press.

89. **Gavriel N.** and **Y. Kaspi**, 2022, The oscillatory motion of Jupiter's polar cyclones results from vorticity dynamics, *Geophys. Res. Lett.*, in press. link

88. Miguel Y., M. Bazot, T. Guillot, S. Howard, **E. Galanti, Y. Kaspi,** W. B. Hubbard, B. Militzer, R. Helled, S. K. Atreya, J. E. P. Connerney, D. Durante, L. Kulowski, J. I. Lunine, D. J. Stevenson, and S. Bolton, 2022, Jupiter's inhomogeneous envelope, *Astronomy and Astrophysics*, 662, A18. link

87. **Guendelman, I.**, D. Waugh, and **Y. Kaspi**, 2022, The seasonal cycle of polar vortices on terrestrial planets, *Planetary. Sci. J.*, Vol. 3, 94. link

86. Okajima S., H. Nakamura and **Y. Kaspi**, 2022, Energetics of transient eddies related to the midwinter minimum of the North Pacific storm-track, *J. Climate*, Vol. 35, 1137–1156. link

85. **Galanti E., D. Raiter, Y. Kaspi** and Tziperman E., 2022, Spatial patterns of the tropical meridional circulation: drivers and teleconnections, *J. Geophys. Res.*, Vol. 127, e2021JD035. link

84. **Duer, K., N. Gavriel, E. Galanti, Y. Kaspi**, L. N. Fletcher, T. Guillot, S. J. Bolton, S. M. Levin, S. K. Atreya, D. Grassi, A. P. Ingersoll, C. Li, L. Li, J. I. Lunine, G. S. Orton, F. A. Oyafuso, J. H Waite, 2021, Evidence for multiple Ferrel-like cells on Jupiter, *Geophys. Res. Lett.,* Vol. 48, 2021GL095651. link

83. **Gavriel N.** and **Y. Kaspi**, 2021, The number and location of circumpolar cyclones on Jupiter explained by vorticity dynamics, *Nature Geoscience*, Vol. 14, 559–563. link

82. Parisi, M., **Y. Kaspi**, **E. Galanti**, D. Durante, S. J. Bolton, S. M. Levin, D. R. Buccino, L. N. Fletcher, W. M. Folkner, T. Guillot, R. Helled, L. Iess, C. Li, K. Oudrhiri, M. H. Wong, 2021, The depth of Jupiter's Great Red Spot constrained by the Juno gravity overflights, *Science*, Vol. 374, 964-968. link

81. Bolton S. J., S. M. Levin, T. Guillot, C. Li, **Y. Kaspi**, G. Orton, M. H. Wong, F. A. Oyafuso, M. Allison, J. Arballo, S. Atreya, H. N. Becker, J. Bloxham, S. Brown, L. N. Fletcher, **E. Galanti**, S. Gulkis, M. Janssen, A. P. Ingersoll, J. L. Lunine, S. Misra, P. Steffes, D. J. Stevenson, J. H. Waite, R. K. Yadav, Z. Zhang, 2021, Microwave observations reveal the deep extent and structure of Jupiter's atmospheric vortices, *Science*, Vol. 374, 968-972. link

80. Nettelmann, N., N. Movshovitz, D. Ni, J. J. Fortney, **E. Galanti**, **Y. Kaspi**, R. Helled, C. R. Mankovich and S. J. Bolton, Theory of Figures to the 7th order and the interiors of Jupiter and Saturn, *Planetary. Sci. J.,* 2, 6, 241. link

79. **Guendelman I.**, D. Waugh and **Y. Kaspi**, 2021, The emergence of a summer hemisphere jet in planetary atmospheres, *J. Atmos. Sci.*, Vol. 78, 10, p. 3337–3348. link

78. Fletcher L. N., F. A. Oyafuso, M. D. Allison M. D., A. P. Ingersoll, L. Li, **Y. Kaspi**, **E. Galanti**, M. H. Wong, G. S. Orton , **K. Duer**, Z. Zhang, C. Li, T. Guillot, S. M. Levin, S. J. Bolton, 2021, Jupiter's Temperate Belt/Zone Contrasts Revealed at Depth by Juno Microwave Observations (2021) *J. Geophys. Res.*, 126, 10, e2021JE006858. link

77. **Hadas O.** and **Y. Kaspi**, 2021, Suppression of baroclinic eddies by strong jets, *J. Atmos. Sci.*, Vol. 76, 2445–2457. link

76. Lee S. and **Y. Kaspi**, 2021, Towards an understanding of the structure of Jupiter's atmosphere using the ammonia distribution and the Transformed Eulerian Mean theory, *J. Atmos. Sci.*, Vol. 76, 2047–2056. link

75. **Galanti E.**, **Y. Kaspi**, **K. Duer**, L. N. Fletcher, A. P. Ingersoll, C. Li, G. S. Orton, T. Guillot, S. M. Levin and S. J. Bolton, 2021, Constraints on the latitudinal profile of Jupiter's deep jets, *Geophys. Res. Lett.,* 48, 9, e2021GL092912. link

74. Okajima S., H. Nakamura and **Y. Kaspi**, 2021, Cyclonic and anticyclonic contributions to atmospheric energetics, *Scientific Reports*, Vol. 11, 13202. link

73. Fletcher et al., 2021, Ice giant system exploration within ESA's Voyage 2050, *Experimental Astronomy,* pp. 12. link

72. **Galanti E.** and **Y. Kaspi**, 2021, Combined magnetic and gravity measurements probe the deep zonal flows of the gas giants, *Mon. Not. Royal Astronom. Soc.*, 501, 2, 2352-2362. link

71. **Kaspi, Y., E. Galanti**, A. P. Showman, D. J. Stevenson, T. Guillot, L. Iess and S. J. Bolton, 2020 Comparison of the deep atmospheric dynamics of Jupiter and Saturn in light of the Juno and Cassini gravity measurements, *Space Sci. Rev.,* 216, 5, 84. link

70. Parisi M., **E. Galanti**, W. M. Folkner, **Y. Kaspi** and D. R. Buccino, Resolving the latitudinal short-scale gravity field of Jupiter using Slepian functions, *J. Geophys. Res.*, 125, e2020JE006416. link

69. **Raiter, D., E. Galanti** and **Y. Kaspi**, 2020, The tropical atmospheric conveyor belt: A coupled Eulerian-Lagrangian analysis of the large-scale tropical circulation, *Geophys. Res. Lett.,* 47, 10, e2019GL086. link

68. **Duer K., E. Galanti** and **Y. Kaspi**, 2020, The range of Jupiter's flow structures fitting the Juno asymmetric gravity measurements, *J. Geophy. Res.*, 125, e2019JE006292. link

67. Lachmy O. and **Y. Kaspi**, 2020, The role of diabatic heating in Ferrel cell dynamics, *Geophys. Res. Lett.,* 47, 23, 2020GL0906. link

66. Fletcher L. N., **Y. Kaspi,** T. Guillot and A. P. Showman, 2020, How well do we understand the belt/zone circulation of Giant Planet atmospheres?, *Space Sci. Rev.*, 216, 2, 30. link

65. T. Imamura, J. Mitchell, S. Lebonnois, **Y. Kaspi**, A. P. Showman and O. Korablev, 2020, Superrotation in planetary atmospheres. *Space Sci. Rev.,* 216, 5, 87. link

64. **Guendelman I.** and **Y. Kaspi**, 2020, Atmospheric dynamics on terrestrial planets with eccentric orbits, *Astrophys. J.*, 901:46. link

63. Fletcher et al., 2020, Ice Giant Systems: The Scientific Potential of Missions to Uranus and Neptune, *Planet. and Space Sci.,* 191, 105030. link

62. **Yuval J.** and **Y. Kaspi**, 2020, Eddy activity response to global warming like temperature changes, *J. Climate*, Vol. 33, 1381-1404. link

61. Parisi M., W. M. Folkner, **E. Galanti, Y. Kaspi**, D. R. Buccino , K. Oudrhiri and S. J. Bolton, 2020, A mascon approach to estimating the depth of Jupiter's Great Red Spot with the Juno mission, *Planet. and Space Sci.,* 181, 104781. link

60. **Duer K., E. Galanti** and **Y. Kaspi**, 2019, Analysis of Jupiter's deep jets combining Juno gravity and time varying magnetic field measurements, *Geophys. Res. Lett.,* 879:L22. link

59. **Guendelman I.** and **Y. Kaspi**, 2019, Atmospheric dynamics on terrestrial planets: the seasonal response to changes in orbital, rotational and radiative timescales, *Astrophys. J.*, 881:67. link

58. **Galanti E., Y. Kaspi**, F. J. Simons, D. Durante, M. Parisi, S. J. Bolton, 2019, Determining the depth of Jupiter's Great Red Spot: a Slepian approach. *Astrophys. J.*, 874:L24. link

57. Iess L., B. Militzer, **Y. Kaspi**, P. Nicholson, D. Durante, P. Racioppa, A. Anabtawi, **E. Galanti**, W. Hubbard, M. J. Mariani, P. Tortora, S. Wahl, M. Zannoni, 2019, Measurement and implications of Saturn's gravity field and ring mass, *Science,* Vol. 364, 1052. link

56. **Galanti E.**, **Y. Kaspi**, Y. Miguel, T. Guillot, D. Durante, P. Racioppa, and L. Iess, 2019, Saturn's deep atmosphere revealed by the Cassini Grand Finale gravity measurements. *Geophys. Res. Lett.,* Vol. 46, 616-624. link

55. Galperin, B., S. Sukoriansky, R.M.B. Young, **R. Chemke**, **Y. Kaspi**, P.L. Read N. Dikovskaya, 2019, Barotropic and geostrophic turbulence, ISSI Zonal Jets book chapter. link

54. Sanchez-Lavega A., L. Sromovsky, A. P. Showman, A. D. Del Genio, R. Young, E. Garcia-Melendo, **Y. Kaspi**, G. S. Orton, N. Barrado-Izagirre, D. Choi, and J. M. Barbara, 2019, Zonal jets in gas giants, ISSI Zonal Jets book chapter. link

53. **Guendelman I.** and **Y. Kaspi**, 2018, An axisymmetric limit for the width of the Hadley cell in a planet with large obliquity and long seasonality, *Geophys. Res. Lett.,* Vol. 45, 13213–13221. link

52. **Yuval J.**, **Afargan, H.** and **Y. Kaspi**, 2018, The seasonal subtropical to eddy-driven jet transition leading to a Pacific midwinter minimum in eddy activity, *Geophys. Res. Lett.,* Vol. 45, 9995-10002. link

51. **Kaspi Y.**, **E. Galanti**, W. B. Hubbard, D. J. Stevenson, S. J. Bolton, L. Iess, T. Guillot, J. Bloxham, J. E. P. Connerney, H. Cao, D. Durante, W. M. Folkner, R. Helled, A. P. Ingersoll, S. M. Levin, J. I. Lunine, Y. Miguel, B. Militzer, M. Parisi and S. M. Wahl 2018, Jupiter's atmospheric jet streams extend thousands of kilometers deep, *Nature,* Vol. 555, 223-226. link

50. Iess L., W. M. Folkner, D. Durante, M. Parisi, **Y. Kaspi**, **E. Galanti**, T. Guillot, W. B. Hubbard, D. J. Stevenson, J. D. Anderson, D. R. Buccino, L. Gomez Casajus, A. Milani, R. Park, P. Racioppa, D. Serra, P. Tortora, M. Zannoni, H. Cao, R. Helled, J. I. Lunine, Y. Miguel, B. Militzer, S. Wahl, J. E. P. Connerney, S. M. Levin and S. J. Bolton. Measurement of Jupiter's asymmetric gravity field, 2018, *Nature,* Vol. 555, 220-222. link

49. Guillot T., Y. Miguel, B. Militzer, W. B. Hubbard, **Y. Kaspi**, **E. Galanti**, H. Cao, R. Helled, S. M. Wahl, L. Iess, W. M. Folkner, D. J. Stevenson, J. I. Lunine, D. R. Reese, A. Biekman, M. Parisi, D. Durante, J. E. P. Connerney, S. M. Levin and S. J. Bolton 2018, A suppression of differential rotation in Jupiter's deep interior, *Nature,* Vol. 555, 227-230. link

48. **Yuval J**. and **Y. Kaspi**, 2018, Eddy response to changes in jet characteristics, *J. Atmos. Sci*., Vol. 75, 1371-1383. link

47. Collins M., S. Minobe, M. Barreiro, S. Bordoni, **Y. Kaspi**, A. Kuwano-Yoshida, N. Keenlyside, E. Manzini, C. H. O'Reilly, R. Sutton, S-P. Xie and O. Zolina, 2018, Climate dynamics and regional climate change, *Nature Climate Change*, Vol. 8, 101-108. link

46. Showman A. P., **Y. Kaspi**, R. Achterberg and A. P. Ingersoll, 2018, The global atmospheric circulation of Saturn, Invited review chapter for: Saturn in the 21st Century. link

45. **Tamarin, T.** and **Y. Kaspi**, 2017, Enhanced poleward propagation of storms under climate change, *Nature Geoscience*, Vol. 10, 908-913. link

44. **Afargan H**. and **Y. Kaspi**, 2017, A midwinter minimum in Atlantic storm track intensity during years of a strong jet, *Geophys. Res. Lett.,* Vol. 44, 12511–12518. link

43. **Tamarin T.** and **Y. Kaspi**, 2017, The poleward shift of storm tracks under global warming: a Lagrangian perspective, *Geophys. Res. Lett.,* Vol. 44, 10666-10674. link

42. **Galanti E.**, H. Cao and **Y. Kaspi**, 2017, Constraining Jupiter's internal flows using Juno magnetic and gravity measurements, *Geophys. Res. Lett.,* Vol. 44, 8173-8181. link

41. **Chemke R.** and **Y. Kaspi**, 2017, Dynamics of massive atmospheres, *Astrophys. J*, 845:1. link

40. **Galanti E.** and **Y. Kaspi**, 2017, Prediction for the flow-induced gravity field of Saturn: implications for Cassini's Grande Finale, *Astrophys. J. Lett.,* 843:L25 link

39. **Kaspi Y**., T. Guillot , **E. Galanti**, Y. Miguel, R. Helled, W. B. Hubbard, B. Militzer, S. M. Wahl, S. Levin, J. E. P. Connerney, and S. J. Bolton 2017, The effect of differential rotation on Jupiter's low-degree even gravity moments, *Geophys. Res. Lett.,* Vol. 44, 5960-5968 link

38. Bolton S. J., A. Adriani, V. Adumitroaie, M. Allison, J. Anderson, S. Atreya, J. Bloxham, S. Brown, J. E. P. Connerney, E. DeJong, W. Folkner, D. Gautier, D. Grassi, S. Gulkis, T. Guillot, C. Hansen, W. B. Hubbard, L. Iess, A. Ingersoll, M. Janssen, J. Jorgensen, **Y. Kaspi,** S. M. Levin, C. Li, J. Lunine, Y. Miguel, A. Mura, G. Orton, T. Owen, M. Ravine, E. Smith, P. Steffes, E. Stone, D. J. Stevenson, R. Thorne, J. Waite, D. Durante,

R. W. Ebert, T. K. Greathouse, V. Hue, M. Parisi, J. R. Szalay, R. Wilson, 2017, Jupiter's interior and deep atmosphere: the first close polar pass with the Juno spacecraft, *Science,* Vol. 356, 821-825 link.

37. **Galanti E.**, D. Durante, S. Finocchiaro, L. Iess, and **Y. Kaspi**, 2017, Estimating Jupiter gravity field using Juno measurements, trajectory estimation analysis, and a flow model optimization, *Astronom. J*, 154:2. link
36. Wahl S. M., W. B. Hubbard , B. Militzer, T. Guillot, Y. Miguel, N. Movshovitz, **Y. Kaspi**, R. Helled, D. Reese, **E. Galanti**, S. Levin, J.E. Connerney, and S. J. Bolton, 2017, Comparing Jupiter interior structure models to Juno gravity measurements and the role of an expanded core, *Geophys. Res. Lett.,* Vol. 44, Vol. 44, 4649–4659. link
35. **O'Neill M. E**., **Y. Kaspi** and L. N. Fletcher, 2017, New interpretation of the Galileo probe sounding indicating a neutrally stable Jovian atmosphere, *Geophys. Res. Lett.,* Vol. 44, 4008-4017. link
34. **Yuval J.** and **Y. Kaspi**, 2017, The effect of vertical baroclinicity concentration on atmospheric macroturbulence scaling relations, *J. Atmos. Sci*., Vol. 74, 1651-1667. link
33. **Galanti E.** and **Y. Kaspi**, 2017, Decoupling Jupiter's deep and atmospheric flows using the upcoming Juno gravity measurements and a dynamical inverse model, *Icarus,* Vol. 286, 46-55. link
32. **Tamarin T.** and **Y. Kaspi**, 2017, Mechanisms controlling the poleward deflection of midlatitude storm tracks, *J. Atmos. Sci*., Vol. 74, 553-572. link
31. **Galanti E.**, **Y. Kaspi** and E. Tziperman, 2017, A full, self-consistent, treatment of thermal wind balance on oblate fluid planets, *J. Fluid Mech*., Vol. 810, 175–195. link
30. **Chemke R.**, **Y. Kaspi** and I. Halevy, 2016, The thermodynamic effect of atmospheric mass on early Earth's temperature, *Geophys. Res. Lett.,* Vol. 43, 11414–11422. link
29. **O'Neill M. E.** and **Y. Kaspi**, 2016, Slantwise convection on fluid planets, *Geophys. Res. Lett.,* Vol. 43, 10611–10620. link
28. **Chemke R.**, **T. Dror** and **Y. Kaspi**, 2016, Barotropic kinetic energy and enstrophy transfers in the atmosphere, *Geophys. Res. Lett.*, Vol. 43, 7725–7734. link
27. **Chemke R.** and **Y. Kaspi**, 2016, The latitudinal dependence of the oceanic barotropic eddy kinetic energy and macro-turbulence energy transport, *Geophys. Res. Lett.,* Vol. 43, 2175–2183. link
26. **Kaspi Y., J. E. Davighi**, **E. Galanti** and W. B. Hubbard, 2016, The gravitational signature of internal flows in giant planets: Comparing the thermal wind approach with barotropic potential-surface methods, *Icarus*, Vol. 276, 170-181. link
25. **Chemke R.** and **Y. Kaspi**, 2016, The effect of eddy-eddy interactions on jet formation and macroturbulent scales, *J. Atmos. Sci*., Vol. 73, 2049-2059. link
24. **Tamarin T.** and **Y. Kaspi**, 2016, The poleward motion of extratropical cyclones from a potential vorticity tendency analysis, *J. Atmos. Sci*., Vol. 73, 1687-1707. link
23. **Galanti E.** and **Y. Kaspi**, 2016, An adjoint based method for the inversion of the Juno and Cassini gravity measurements into wind fields, *Astrophys. J*, 820:91. link
22. **Yuval J.** and **Y. Kaspi**, 2016, Eddy activity sensitivity to changes in the vertical structure of baroclinicity, *J. Atmos. Sci*., Vol. 73, 1709-1726. link
21. **Parisi M.**, **E. Galanti**, S. Finocchiaro, L. Iess and **Y. Kaspi**, 2016, Probing the atmospheric dynamics of Jupiter's Great Red Spot with the Juno gravity experiment, *Icarus*, Vol. 267, 232-242. link
20. Helled R., **E. Galanti** and **Y. Kaspi**, 2015, Saturn's fast spin determined from its gravitational field and oblateness, *Nature*, Vol. 520, 202-204. link
19. **Chemke R.** and **Y. Kaspi**, 2015, The latitudinal dependence of atmospheric jet scales and macroturbulent energy cascades, *J. Atmos. Sci*., Vol. 72, 3891–3907. link
18. **Kaspi Y.** and A. P. Showman, 2015, Atmospheric dynamics of terrestrial exoplanets over a wide range of orbital and planetary parameters, *Astrophys. J*, 804:60. link

17. **Chemke R.** and **Y. Kaspi**, 2015, Poleward migration of eddy-driven jets, *J. Adv. Model. Earth Sys.*, Vol. 07, 1457–1471. link
16. Showman A. P., R. D. Wordsworth, T. M. Merlis, and **Y. Kaspi**, 2014. Atmospheric circulation of terrestrial exoplanets. Comparative Climatology of Terrestrial Planets book chapter, pp. 277-326, U. Arizona press. link
15. **Kaspi Y.,** A. P. Showman, W. B. Hubbard, O. Aharonson and R. Helled, 2013. Atmospheric confinement of jet streams on Uranus and Neptune, *Nature*, Vol. 497, 344-347. link
14. **Kaspi Y.,** 2013, Inferring the depth of atmospheric dynamics on Jupiter and Saturn from odd gravity harmonics, *Geophys. Res. Lett.,* Vol. 40, 676-680. link
13. Liu J., T. Schneider and **Y. Kaspi**, 2013. Predictions of thermal and gravitational signals of Jupiter's deep zonal winds, *Icarus,* Vol. 224, 114-125. link
12. Ryoo J-M., **Y. Kaspi**, D. Waliser, E. Fetzer, G. Kiladis, D. Waugh, J. Kim, 2013, Impact of Rossby wave breaking on U.S. west coast winter precipitation during the 2008-2010 ENSO cycle, *J. Climate*, Vol. 26, 6360-6382. link
11. Showman A. P. and **Y. Kaspi**, 2013, Atmospheric dynamics of Brown Dwarfs and directly imaged exoplanets, *Astrophys. J*, 776:85. link
10. **Kaspi Y.** and T. Schneider, 2013. The role of stationary eddies in shaping midlatitude storm tracks, *J. Atmos. Sci*., Vol. 70, 2596-2613. link
9. **Kaspi Y.** and T. Schneider, 2011. Winter cold of eastern continental boundaries induced by warm ocean waters, *Nature*, Vol. 471, 621-624. link
8. Showman A. P., **Y. Kaspi**, and G. R. Flierl, 2011. Scaling laws for convection and jet speeds in the giant planets, *Icarus*, 211, 1258-1273. link
7. **Kaspi Y.** and T. Schneider, 2011. Downstream self-destruction of storm tracks, *J. Atmos. Sci*., Vol., 68, 2459-2464. link
6. **Kaspi Y.,** W. B. Hubbard, A. P. Showman and G. R. Flierl, 2010. The gravity signature of Jupiter's internal dynamics, *Geophys. Res. Lett.,* Vol. 37, L01204. link
5. **Kaspi Y.,** G. R. Flierl and A. P. Showman, 2009. The deep wind structure of the giant planets: Results from an anelastic general circulation model, *Icarus,* Vol. 202, 525-542. link
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