

Yohai Kaspi

Department of Earth and Planetary Sciences
Weizmann Institute of Science
Rehovot, Israel, 76100

Tel: +972-8-934-4238
email: yohai.kaspi@weizmann.ac.il
www.weizmann.ac.il/EPS/kaspi

Research Interests: Planetary atmospheres; geophysical fluid dynamics; circulation of atmospheres and oceans; climate dynamics; dynamics of giant planet atmospheres and interiors; gravity science; radio-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 Postdoctoral Training Program
- Chair, Weizmann Institute Helen Kimmel Center for Planetary Science
- Chair, American Meteorological Society's (AMS) 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

• MIT Houghton Lecturer	2025
• NASA Honors Medal for Exceptional Individual Scientific Achievement	2023
• Peking University Distinguished Lecturer	2023
• 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, 2015, 2018, 2020, 2022, 2024
- Turbulence in the oceans and atmospheres, WIS Fall 2016
- Planetary Climate, WIS Spring 2022

Service

- Weizmann Institute Scientific Council Steering Committee 2022 - present
- Weizmann Institute Scientific Promotions Committee 2024 - present
- Weizmann Institute Scientific Appointments Committee 2019 - 2022
- Organizer of AMS Atmospheres and Oceans Fluid Dynamics meeting, USA, 2022 & 2024.
- Co-Organizer of Stormtracks 2018: Perspectives on storm tracks in a changing climate, Sweden, 2018.
- Co-Organizer of the Latsis Symposium on Atmosphere and Climate Dynamics: From Clouds to Global Circulations, Switzerland, 2014.
- Co-Organizer of the GFD Days Symposium, Sde Boqer, Israel, 2015, 2016, 2017, 2019 & 2022.
- Organizer of Departmental seminar, Earth and Planetary Sciences, WIS, 2011-2019.
- 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, SNSF, NSF, NASA Outer Planets program, NASA Solar Systems Research Programs, Israeli Science Foundation, German-Israeli Science Foundation, NSFC-ISF, Leverhulme Trust, Deutsche Forschungsgemeinschaft, Pazi 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
Thesis title: The global tropical circulation and its changes under global warming
- Or Hadas 2018 - 2021
Thesis title: Suppression of baroclinic eddies by strong jets
- Erez Aviv 2021 - 2024
Thesis title: Quantifying the relation between jet meandering and storm intensity
- Maayan Ziv 2022 - 2024
Thesis title: Characterizing Jupiter's interior using machine learning
- Rachel Navon 2023 - 2025
Thesis title: Surface thermal tides and atmospheric response in Venus's lower atmosphere

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: Google Research
- Hilla Afargan-Gerstman 2012 - 2018
Thesis title: The seasonal cycle of storm track eddies
Current position: Ambizione Fellow, University of Bern
- Ilai Guendelman 2017 - 2022
Thesis title: Seasonal effects on planetary climate
Current position: Assistant Professor, Ben Gurion University
- Keren Duer 2018 - 2023
Thesis title: Deep atmospheric jets and circulation on giant planets
Current position: Postdoctoral fellow, Leiden Observatory
- Nimrod Gavriel 2020 - 2024
Thesis title: The Dynamics of Jupiter's Polar Cyclones
Current position: Postdoctoral fellow, Weizmann Institute
- Maria Smirnova 2020 - present
Topic: Atmospheric radio-occultations
- Or Hadas 2021 - present
Topic: Storm track dynamics
- Maayan Ziv 2024 - present
Topic: Interior structure of giant planets
- Rachel Navon 2025 - present
Topic: The atmospheric dynamics of Venus
- Wuquishi Yao 2025 - present
Topic: Atmospheric convection

Postdoc

- Marzia Parisi 2014-2016
Research topic: Determining the depth of Jupiter's Great Red Spot with Juno's gravity measurements
Current position: Senior Research Scientist, Jet Propulsion Laboratory
- Morgan E. O'Neill 2015-2017
Research topic: Convection on fluid planets
Current position: Assistant Professor, Stanford
- Soumik Ghosh 2020-2023
Research topic: Ferrel cell dynamics
Current position: Postdoctoral fellow, Canadian Climate Center
- Meir Zeilig-Hess 2021-2023
Research topic: Tropical cyclones
Current position: Senior Scientist, Rafael

- Moritz Günther — MPG-WIS Postdoc (Co-advised with Sarah Kang) 2024 - present
Research topic: Tropical atmospheric dynamics
- Gidi Yoffe, 2025 - present
Research topic: Detection of biomolecules on the surface of the icy moons

Publications

Bold face denotes members of the Kaspi Research group

121. **Galanti E., Smirnova M., Ziv, M.,** Fonsetti, M., Caruso, A., Buccino, D. R., Hubbard, W. B., Militzer, B., Bolton, S. J., Guillot, T., Helled R., Levin S. M., Parisi M., Park R. S., Steffes P., Tortora P., Withers P., Zannoni M. and **Kaspi Y.**, 2025, The shape and size of Jupiter, *Nature Astro.*, in press. [link](#)
120. **Smirnova M., E. Galanti,** A. Caruso, L. N. Fletcher, D. R. Buccino, L. G. Casajus, W. B. Hubbard, G. S. Orton, M. Parisi, R. S. Park, M. Zannoni, P. Steffes, S. M. Levin, S. J. Bolton, P. Tortora, **Y. Kaspi**, 2025, Probing Jupiter's atmosphere through Juno radio-occultations: analysis of the atmospheric thermal structure, *Geophys. Res. Lett.*, in revision. [link](#)
119. Caruso A., L. G. Casajus, **M. Smirnova,** D. R. Buccino, **E. Galanti,** W. B. Hubbard, A. Togni, E. Gramigna, M. Parisi, R. S. Park, M. Zannoni, P. Steffes, S. M. Levin, S. J. Bolton, P. Tortora, **Y. Kaspi**, 2025, Probing Jupiter's atmosphere through Juno radio-occultations: methodology and initial observations, *Geophys. Res. Lett.*, in press. [link](#)
118. **Hadas O.** and **Y. Kaspi**, 2025, Stronger Jet, Weaker Storms: Resolving the Atlantic-Pacific Storm Paradox, *Nature Comm.*, in revision. [link](#)
117. **Hadas O.** and **Y. Kaspi**, 2025, Quantifying the influence of climate on storm activity using machine learning, *Geophys. Res. Lett.*, in revision. [link](#)
116. **Gavriel N.** and **Y. Kaspi**, 2025, Dynamical constraints on the vertical structure of Jupiter's polar cyclones, *Proc. Nat. Acad. Sci. (PNAS)*, in press. [link](#)
115. **Aviv E.** and **Y. Kaspi**, 2025, The relation between jet meandering and storm intensity in an idealized setting, *J. Climate*, in press. [link](#)
114. **Guendelman I.** and **Y. Kaspi**, 2025, An idealized general circulation model for the atmospheric circulation on the ice giants, *Astron. & Astrophys.*, aa54015-25. [link](#)
113. **Duer K., N. Gavriel, E. Galanti,** E. Tziperman and **Y. Kaspi**, 2025, From gas to ice giants: A unified mechanism for equatorial jets, *Science Adv.*, 11, ads8899. [link](#)
112. **Yoffe G., K. Duer,** T. Nordheim, I. Halevy and **Y. Kaspi**, 2025, Fluorescent biomolecules detectable in near-surface ice on Europa, *Astrobiology*, 25, 5, 359-366. [link](#)
111. **Hadas O.** and **Y. Kaspi**, 2025, A Lagrangian perspective on the growth of midlatitude storms, *AGU Adv.*, Vol. 6, e2024AV001555. [link](#)
110. **Galanti E., D. Durante, L. Iess** and **Y. Kaspi**, 2025, Observational constraints on the strength and depth of the zonal jets on Saturn, *Nature Comm.*, Vol 16, 2618. [link](#)
109. Masters A. et al., 2025, Magnetosphere and Plasma Science with the Jupiter Icy Moons Explorer, *Space Sci. Rev.*, 221, 24. [link](#)
108. **Ziv M., E. Galanti,** S. Howard, T. Guillot and **Y. Kaspi**, 2024, Characterizing Jupiter's interior using machine learning reveals four key structures, *Astron. and Astrophys.*, 692, A251. [link](#)
107. **Duer K., E. Galanti** and **Y. Kaspi**, 2024, Depth dependent dynamics explain the equatorial jet difference between Jupiter and Saturn, *Geophys. Res. Lett.*, Vol. 51, 6, e2023GL107354. [link](#)
106. **Ziv M., E. Galanti,** A. Sheffer, S. Howard, T. Guillot and **Y. Kaspi**, 2024, NeuralCMS: A deep learning approach to study Jupiter's interior, *Astronomy and Astrophysics*, 686, L7. [link](#)
105. **Raiter D., E. Galanti,** R. Chemke and **Y. Kaspi**, 2024, Linking future tropical precipitation changes to zonally-asymmetric Large-Scale meridional circulation, *Geophys. Res. Lett.*, Vol. 51, 6, e2023GL106072. [link](#)

104. **Ghosh S.**, O. Lachmy and **Y. Kaspi**, 2024, The role of diabatic heating in the midlatitude atmospheric circulation response to climate change, *J. Climate*, Vol. 37, 10, p. 2987-3009. [link](#)
103. Okajima S., H. Nakamura H. and **Y. Kaspi**, 2024, Anticyclonic suppression of the North Pacific transient eddy activity in midwinter, *Geophys. Res. Lett.*, Vol. 51, 2, e2023GL106932. [link](#)
102. **Kaspi, Y.**, **E. Galanti**, R. S. Park, **K. Duer**, **N. Gavriel**, D. Durante, L. Iess, M. Parisi, D. Buccino, T. Guillot, D. J. Stevenson and S. J. Bolton, 2023, Observational evidence for cylindrically oriented zonal flows on Jupiter, *Nature Astronomy*, 7, 12, p. 1463-1472. [link](#)
101. **Duer K.**, **E. Galanti** and **Y. Kaspi**, 2023, Gas giant simulations of eddy-driven jets accompanied by deep meridional circulation, *AGU Advances*, 4, e2023AV000908. [link](#)
100. **Gavriel N.** and **Kaspi Y.**, 2023, The westward drift of Jupiter's polar cyclones explained by a center-of-mass approach, *Geophys. Res. Lett.*, Vol. 50, 19, e2023GL103635. [link](#)
99. Fletcher, L., T. Cavalie, D. Grassi, R. Hueso, L. M. Lara, **Y. Kaspi**, **E. Galanti** et al., 2023, Jupiter science enabled by ESA's Jupiter Icy Moons Explorer, *Space Sci. Rev.*, 219, 7, 53. [link](#)
98. **Hadas O.**, G. Datseris, J. Blanco, S. Bony, R. Caballero, B. Stevens and **Y. Kaspi**, 2023, The role of baroclinic activity in controlling Earth's albedo in the present and future climates, *Proc. Nat. Acad. Sci. (PNAS)*, Vol. 120, 5, e220877812. [link](#)
97. Okajima S., H. Nakamura H. and **Y. Kaspi**, 2023, Distinct Roles of Cyclones and Anticyclones in Setting the Midwinter Minimum of the North Pacific Eddy Activity: A Lagrangian Perspective, *J. Climate*, Vol. 36, 14, p. 4793-4814. [link](#)
96. **Galanti E.**, **Y. Kaspi** and T. Guillot, 2023, The Shape of Jupiter and Saturn Based on Atmospheric Dynamics, Radio Occultations and Gravity Measurements, *Geophys. Res. Lett.*, Vol. 50, 6, e2022GL102. [link](#)
95. Howard S., Guillot T., Bazot M., **Galanti E.**, **Y. Kaspi**, 2023, Jupiter's interior from Juno: Equation-of-state uncertainties and dilute core extent, *Astronomy and Astrophysics*, 672, A33. [link](#)
94. Blanco J. A., R. Caballero, G. Datseris, B. Stevens, S. Bony, **O. Hadas** and **Y. Kaspi**, 2023, A cloud-controlling factor perspective on the hemispheric asymmetry of extratropical cloud albedo, *J. Climate*, Vol. 36, 6, p. 1793-1804. [link](#)
93. Datseris G., J. Blanco, **O. Hadas**, S. Bony, R. Caballero, **Y. Kaspi** and B. Stevens, 2023, Minimal recipes for global cloudiness *Geophys. Res. Lett.*, 49, 20, e2022GL099. [link](#)
92. **Gavriel N.** and **Y. Kaspi**, 2022, The oscillatory motion of Jupiter's polar cyclones results from vorticity dynamics, *Geophys. Res. Lett.*, Vol. 49, e2022GL098708. [link](#)
91. **Guendelman I.** and **Y. Kaspi**, 2022, The key factors controlling the seasonality of planetary climate *AGU Advances*, e2022AV000684. [link](#)
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*, 13, 4632. [link](#)
89. Militzer B., W. B. Hubbard, S. Wahl, J. I. Lunine, **E. Galanti**, **Y. Kaspi**, Y. Miguel, T. Guillot, K. M. Moore, M. Parisi, J. E. P. Connerney, R. Helled, H. Cao, C. Mankovich, D. J. Stevenson, R. S. Park, M. Wong, S. K. Atreya, J. Anderson, S. J. Bolton, 2022, Juno spacecraft measurements of Jupiter's gravity imply a dilute core, *Planetary. Sci. J.*, Vol. 3, 185. [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. Oyafo, 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. Oyafo, 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. Oyafo, 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. Geophys. 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](#)
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