

Curriculum Vitae – short version

Eli Galanti

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Personal details:

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Employment:

- Assistant Staff Scientist (with Dr. Yohai Kaspi). Department of Earth and planetary Sciences, Weizmann Institute of Science. April 2016 – present.
- Research Scientist (with Dr. Yohai Kaspi). Department of Earth and planetary Sciences, Weizmann Institute of Science. September 2014 – March 2016.
- Research Scientist (with Dr. Yohai Kaspi). Department of Earth and planetary Sciences, Weizmann Institute of Science. September 2012 –August 2014.
- Research Scientist (with Prof. Colin Price). Department of Geophysics and Planetary Sciences, Tel Aviv University. April 2007 –August 2014.
- Fellow. The Porter School of Environmental Studies and Department of Geophysics, Tel Aviv University. April 2005 – March 2007.
- Research Coordinator. The Porter School of Environmental, Tel Aviv University. April 2007 – September 2012.

Education:

- Postdoctoral Research Scientist -Department of Geophysics, Tel Aviv University. Field: prediction of air pollution transport. September 2004 -March 2005.
- Postdoctoral Research Scientist -International Research Institute for Climate Prediction, Columbia University. Field: Seasonal SST prediction. Advisor – Dr. Steve Zebiak. October 2002 - July 2004.
- Ph.D. Weizmann Institute of Science. Thesis: Dynamics and predictability of ENSO. Advisor – Prof. Eli Tziperman. March 2003.
- B.Sc. Geophysics and planetary sciences, Tel Aviv University. Field: geophysics and atmospheric dynamics. Magna Cum Laude. August 1996.

Other Appointments:

Teaching

- 'Global warming debates' – Weizmann Institute of Science. 2017. (3hr, one semester)
- 'Introduction Earth Climate System' – Weizmann Institute of Science. 2017. (3hr, one semester)
- 'Mathematical modeling in Earth Sciences' - Weizmann Institute of Science. 2016. (3hr, one semester)
- 'Great Papers in Earth Sciences' - Weizmann Institute of Science. 2014. (2hr, one semester)
- 'Introduction Earth Climate System' – Weizmann Institute of Science. 2014. (2hr, one semester)
- 'Environmental Challenges in Israel – Field tours' – The Porter School of Environmental Studies, Tel Aviv University. 2009-2013. (3hr, one semester).
- 'The oceans and mankind – between struggle and cooperation' – The Porter School of Environmental Studies, Tel Aviv University. 2008-2012. (2hr, one semester).
- 'Climate and the Human environment' – Department of Geography and Human Environment, Tel Aviv University. 2008-2012 (4hr, one semester)
- 'Introduction to Climate' – Department of Geography, Hebrew University. 2010. (3hr, one semester)
- 'Master students forum' – The Porter School of Environmental Studies, Tel Aviv University. 2010 (1hr, two semesters)
- 'Introduction to Climate' – Israel Maritime College, Ruppin Academic Center. 2006. (2hr, one semester)

Peer review

- J. of Climate, J. of Atmospheric sciences, Environmental Modelling and Software, Atmospheric Research, J. Atmos. Solar-Terrestrial Phys, Physica A., MNRAS, J. Fluid Dynamics

Review boards

- Expert evaluator for the European Union 7th framework program (FP7). Leading a review panel (in Brussels) of large scale collaborative projects in the field of oceanic response to climate change. March 2012.

Awards:

- Rieger-JNF fellowship for Environmental studies. 1999-2001.

Publications:

- 1) **Galanti, E.** and E. Tziperman, 2000. On ENSO's phase locking to the seasonal cycle in the fast SST, fast wave, and mixed mode regimes. *Journal of the Atmospheric Sciences*. 57, 2936-2950. (Times cited: **38**)
- 2) Harrison, M. J., A. Rosati, B. J. Soden, **E. Galanti**, and E. Tziperman, 2002: An examination of air-sea coupling for ENSO simulation and prediction. *monthly Weather Review*, 130 (3), 723-732. . (Times cited: **23**)
- 3) **Galanti, E.**, E. Tziperman, M. Harrison, A. Rosati, R. Giering, Z. Sirkes, 2002. The equatorial thermocline outcropping - A seasonal control on the tropical Pacific ocean-atmosphere instability. *Journal of Climate*, 15 (19), 2721-2739. (Times cited: **36**)
- 4) **Galanti, E.**, and E. Tziperman, 2003: A Mid-Latitude -ENSO teleconnection mechanism via baroclinically unstable long Rossby waves. *Journal of Physical Oceanography*. 33 (9), 1877-1888. . (Times cited: **31**)
- 5) **Galanti, E.**, E. Tziperman, M. Harrison, A. Rosati, and Z. Sirkes, 2003: A study of ENSO prediction using a hybrid-coupled model and the adjoint method for data assimilation. *monthly Weather Review*, 131 (11), 2748-2764. . (Times cited: **17**)
- 6) Haikin, N., I. Mahrer, T. Reisin, **E. Galanti**, and P. Alpert, 2010: A high resolution study of Atmospheric dispersion over a coastal urban area with complex terrain. *Air Pollution Modeling and Its Application XX*, 75-80. Springer.
- 7) Kohn, M., **E. Galanti**, C. Price, K. Lagouvardos and V. Kotroni, 2011: Now-Casting Thunderstorms in the Mediterranean Region using Lightning Data, *Atmos. Res.*, 100, 489-502.
- 8) Price, C., Y. Yair, A. Mugnai, K. Lagouvardos, M. C. Llasat, S. Michaelides, U. Dayan, S. Dietrich, **E. Galanti**, L. Garrote, N. Harats, D. Katsanos, M. Kohn, V. Kotroni, M. Llasat-Botija, B. Lynn, L. Mediero, E. Morin , K. Nicolaidis, S. Rozalis, K. Savvidou, B. Ziv, 2011: The FLASH Project: Using lightning data to better understand and predict flash floods, *Environ. Sci. & Policy*, 14, 898-911.
- 9) Price, C., Y. Yair, A. Mugnai, K. Lagouvardos, M. C. Llasat, S. Michaelides, U. Dayan, S. Dietrich, F. Di Paola, **E. Galanti**, L. Garrote, N. Harats, D. Katsanos, M. Kohn, V. Kotroni, M. Llasat-Botija, B. Lynn, L. Mediero, E. Morin , K. Nicolaidis, S. Rozalis, K. Savvidou, B. Ziv, 2011: Using lightning data to better understand and predict flash floods in the Mediterranean, *Surveys in Geophysics*, 32(6), 733-751.
- 10) Harnik, N., **E. Galanti**, O. Martius, and O. Adam. 2014. The anomalous merging of the African and North Atlantic jet streams during Northern Hemisphere winter of 2010. *Journal of Climate*, 27(19), 7319-7334.
- 11) Mezuman, K, C. Price, and **E. Galanti**. 2014. On the spatial and temporal distribution of global thunderstorm cells. *Environ. Res. Lett.* 9(12), 124023.
- 12) N.Haikin, N, T. Reisin, **E. Galanti**, I. Mahrer, P. Alpert, 2015: Inner-structure of Atmospheric Inversion Layers in the Eastern Mediterranean. *Boundary-Layer Meteorology*. 156(3), 471-487.
- 13) Silver, I., C. Price, **E. Galanti**, and A. Shuval: 2015: Anomalous strong vertical magnetic fields

from distant ELF/VLF sources. *JGR – space physics*. 120(7), 6036-6044.

- 14) Helled, R., **E. Galanti**, and Y. Kaspi. 2015. A fast spinning Saturn as determined from its gravitational field and oblateness. *Nature*, 520, 202-204.
- 15) Parisi M., **E. Galanti.**, S. Finocchiaro, L. Iess, and Y. Kaspi, 2016. Probing the depth of Jupiter's Great Red Spot with the Juno gravity experiment. *Icarus*, 267, 232-242.
- 16) **Galanti, E.** and Y. Kaspi, 2016: An adjoint based method for the inversion of the Juno and Cassini gravity measurements into wind fields. *The Astrophysical Journal*, 820(2), 91.
- 17) 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*, 276, 170-181.
- 18) **Galanti, E.**, Y. Kaspi, and E. Tziperman, 2017: A full, self-consistent treatment of thermal wind balance on oblate fluid planets. *Journal of Fluid Mechanics*. 810, 175–195.
- 19) **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*, 286, 46-55.
- 20) 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, S.J. Bolton, 2017: Comparing Jupiter interior structure models to Juno gravity measurements and the role of a dilute core. *Geophysical Research Letters*, 44.
- 21) **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. *The Astronomical Journal*, 154(2).
- 22) Kaspi, Y., T. Guillot, **E. Galanti**, Y. Miguel, R. Helled, W.B. Hubbard, B. Militzer, and S.M. Wahl, 2017: The effect of differential rotation on Jupiter's low-order even gravity moments. *Geophysical Research Letters*, 44.
- 23) **Galanti, E.** and Y. Kaspi, 2017: Prediction for the flow-induced gravity field of Saturn: implications for Cassini's Grande Finale. *The Astrophysical Journal Letters*, , 843 (2), L25.
- 24) **Galanti, E.**, H. Cao, and Y. Kaspi, 2017: Constraining Jupiter's internal flows using Juno magnetic and gravity measurements. *Geophysical Research Letters*, 44. 8173–8181.

Other publications:

- 25) **Galanti, E.**, 2003: Dynamics and predictability of ENSO -a study using a hybrid-coupled model and the adjoint method. *Ph.D. Thesis*.