Curriculum Vita – Boris Galperin

1. PERSONAL

Work Address:	College of Marine Science, MSL 138F, University of South Florida, 140 7th Avenue South, St. Petersburg, FL 33701
Telephone:	(727) 553 1249 (office)
Fax:	(727) 553-1189
Email:	bgalperin@usf.edu

2. EDUCATION

1982	Ph.D., Technion - Israel Institute of Technology, Haifa, Israel
1975	M.A., Latvian State University, Riga, Latvia
1970	Special School in Physics and Mathematics in Kiev, Ukraine

3. ACADEMIC EXPERIENCE

1989-present	Associate Professor of Physical Oceanography, University of South Florida
1987-1989	Research Staff Member, Program in Applied and Computational Mathematics, Princeton University
1983-1987	Research Staff Member, Program in Atmospheric and Oceanic Sciences, Princeton University

4. PROFESSIONAL EXPERIENCE

1976-1977	Engineer, Central Office of Mechanization and Automatics, Riga, Latvia
1975-1976	Engineer-Mathematician, State Office for Design and Development of Automated Management Systems, Kiev, Ukraine

5. PROFESSIONAL SOCIETIES AND ASSOCIATIONS

The American Meteorological Society (AMS)
The American Physical Society (APS)
The American Astronomical Society (AAS)
American Geophysical Union (AGU)
European Geophysical Society (EGS)

6. AWARDS AND HONORARY CITATIONS

2002-2003	USF Outstanding Faculty Research Achievement Award
2008-2009	USF Outstanding Research Achievement Award
November 2002	A 2002 PRL paper highlighted in Physics Update, “How Jupiter Got Its Stripes,” in Physics Today
June 2004	AGU Press Release “Link Discovered between Earth's Ocean Currents and Jupiter's Bands” highlights 2004 GRL paper (http://www.agu.org/news/press/pr_archives/2004/prrl0425.html)
October 2008	A 2008 PRL paper highlighted in the article “Focus: Big Waves from a Small Source” by the American Physical Society under the category “Spotlighting exceptional research in Physics” (http://physics.aps.org/story/v22/st14)

7. TEACHING AND RESEARCH INTERESTS

Geophysical fluid dynamics; hydrodynamic stability; turbulence theory; geophysical turbulence; planetary circulations; fluid dynamics; waves; atmospheric, marine and oceanic boundary layers

8. GRADUATE STUDENTS

Jessica Caggiano – was a PhD student in 2019 but changed Major Professor to Don Chambers
Esa-Matti Tastula – PhD; graduated in 2015; won the Sackett Prize for Innovative Research that recognizes demonstrated excellence in a completed research project
Jesse Hoemann – former PhD student who left our program. We have co-authored 5 reviewed papers.

9. STUDENT COMMITTEES

PhD

Michael Kosempa	graduated in 2017	
Rachel Walker	graduated in 2015	Civil Engineering, USF
Nityanand Sinha	graduated in 2013	Civil Engineering, USF
Cigdem Akan	graduated in 2012	Civil Engineering, USF
Hari Vijayan Warrior	graduated in 2004	
Robert William Helber	graduated in 2003	
Mark Vincent	graduated in 2002	
Nancy Jeanne Schmidt	graduated in 2001	
David Carr Burwell	graduated in 2001	
Zaihua Ji	graduated in 1997	
Lin Qiao	graduated in 1996	

MS

Amanda Linville	graduated in 2007
Michelle Valenti	graduated in 1995
Zhen Li	graduated in 1993

10. COURSES TAUGHT

Directed research
Dissertation
Fluid Dynamics I
Fluid Dynamics II
Geophysical Fluid Dynamics
Geophysical Turbulence
Mathematical Tools
Mathematics for Physicists
Turbulence and Planetary Boundary Layers
Spectral Methods in Turbulence
Introduction to Physical Oceanography
Numerical Modeling in Physical Oceanography

11. BOOKS AND MONOGRAPHS

1. *Zonal Jets: Phenomenology, Genesis, and Physics,* 2019. B. Galperin and P. L. Read, Eds. Cambridge University Press, ~550pp.

2. *Marine Turbulence - Theories, Observations and Models. Results of the CARTUM Project, 2003.* Guest Editor for Section 7: *Large-Scale Processes.* Cambridge - New York: Cambridge University Press.

3. *Large Eddy Simulation of Complex Engineering and Geophysical Flows,* 1993, B. Galperin, and S. A. Orszag., Eds., pp. i-620. Cambridge - New York: Cambridge University Press.

12. JOURNAL PUBLICATIONS

1. Cabanes, S., S. Espa, B. Galperin, R. M. B. Young, and P. L. Read, 2020: Reveal the energetic power of turbulence in planetary atmospheres. To be submitted to *Nature*.
2. Espa, S. S. Cabanes, G. P. King, G. Di Nitto, and B. Galperin, 2020: Eddy-wave duality in a rotating flow. Submitted to *Physics of Fluids*, in review.
3. Galperin, B., and Sukoriansky, S., 2020: QNSE theory of the anisotropic energy spectra of atmospheric and oceanic turbulence. Resubmitted to *Physical Review Fluids*, in review.
4. Galperin, B., and Sukoriansky, S., 2019: Seasonal oceanic variability on submesoscales: Turbulence perspective. Submitted to *Ocean Dynamics,* in review.
5. Galperin, B., J. Hoemann, S. Espa, G. DiNitto, and G. Lacorata, 2016: Anisotropic macroturbulence and diffusion associated with a westward zonal jet: From laboratory to planetary atmospheres and oceans. *Physical Review* E, **94**, 063102. doi: 10.1103/PhysRevE.94.063102.
6. Sukoriansky, S., and B. Galperin, 2016: QNSE theory of turbulence anisotropization and onset of the inverse energy cascade by solid body rotation. *Journal of Fluid Mechanics*, **805,** 384-421, doi:10.1017/jfm.2016.568.
7. Tastula, E.-M., M.A. LeMone, J. Dudhia and B. Galperin, 2016: The impact of the QNSE-EDMF scheme and its modifications on boundary layer parameterization in WRF: modeling of CASES-97. *Quarterly Journal of the Royal Meteorological Society,* **142**, 1182–1195. doi:10.1002/qj.2723
8. Tastula, E.-M., B. Galperin, J. Dudhia, M.A. LeMone, S. Sukoriansky and Timo Vihma, 2015: Methodical assessment of the differences between the QNSE and MYJ PBL schemes for stable conditions. *Quarterly Journal of the Royal Meteorological Society,* **141**, 2077–2089, DOI:10.1002/qj.2503.
9. Tastula, E.-M., B. Galperin, S. Sukoriansky, A. Luhar, and P. Anderson, 2015: The importance of surface layer parameterization in modeling of stable atmospheric boundary layers. *Atmospheric Science Letters,* **16**, 83-88, doi:10.1002/asl2.525.
10. Sun, J., C.J. Nappo, L. Mahrt, D. Beluši´c, B. Grisogono, D.R. Stauffer, M. Pulido, C. Staquet, Q. Jiang, A. Pouquet, C. Yagüe, B. Galperin, R.B. Smith, J.J. Finnigan, S.D. Mayor, G. Svensson, A.A. Grachev, and W.D. Neff, 2015: Review of wave-turbulence interactions in the stable atmospheric boundary layer. *Rev. Geophys*., **53**, 956–993, doi:10.1002/2015RG000487
11. Galperin, B., J. Hoemann, S. Espa, and G. Di Nitto, 2014: Anisotropic turbulence and Rossby waves in an easterly jet: An experimental study. *Geophysical Research Letters*, **41**, 6237–6243. doi:10.1002/2014GL060767.
12. Galperin, B., S. Sukoriansky, N. Dikovskaya, R.M.B. Young, P.L. Read, A.J. Lancaster, and D. Armstrong, 2014: Cassini observations reveal a regime of zonostrophic macroturbulence on Jupiter. *Icarus*, **229**, 295-320. doi:10.1016/j.icarus.2013.08.030.
13. Tastula, E.-M., T. Vihma, E. Andreas, B. Galperin, 2013: Validation of the diurnal cycles in atmospheric reanalyses over Antarctic sea ice. *Journal of Geophysical Research - Atmospheres*, **118**, 4194-4204. doi:10.1002/jgrd.50336.
14. Sukoriansky, S. and B. Galperin, 2013: An analytical theory of the buoyancy - Kolmogorov subrange transition in turbulent flows with stable stratification. *Philosophical Transactions of the Royal Society, Series* A – Mathematics, Physics, Engineering Science, **371,** SI, UNSP 20120212, doi: 10.1098/rsta.2012.0212 Published: JAN 13 2013.
15. Sukoriansky, S., N. Dikovskaya, R. Grimshaw, and B. Galperin, 2012: Rossby waves and zonons in zonostrophic turbulence. AIP Conf. Proc. **1439**, 111-122; doi: 10.1063/1.3701355.
16. Petrosyan, A., B. Galperin, S.E. Larsen, S.R. Lewis, A. Määttänen, P.L. Read, N. Renno, L.P.H.T. Rogberg, H. Savijarvi, T. Siili, A. Spiga, A. Toigo, L. Vazquez, 2011: The Martian atmospheric boundary layer. *Reviews of Geophysics*, **49,** RG3005, doi: 10.1029/2010RG000351.
17. Galperin, B., and S. Sukoriansky, 2010: Geophysical flows with anisotropic turbulence and dispersive waves: flows with stable stratification. *Ocean Dynamics*, **60**, 1319–1337, doi: 10.1007/s10236-010-0325-z.
18. Galperin, B., S. Sukoriansky, and N. Dikovskaya, 2010: Geophysical flows with anisotropic turbulence and dispersive waves: flows with a β-effect. *Ocean Dynamics*, **60,** 427–441, doi:10.1007/s10236-010-0278-2.

19. Sukoriansky, S., N. Dikovskaya, N., and B. Galperin, 2009: Transport of momentum and scalar in anisotropic turbulent flows with dispersive waves. *Geophysical Research Letters,* **36**, L14609, doi:10.1029/2009GL038632.
20. Maximenko, N., P. Niiler, M.H. Rio, O. Melnichenko, L. Centurioni, D. Chambers, V. Zlotnicki and B. Galperin, 2009: Mean dynamic topography of the ocean derived from satellite and drifting buoy data using three different techniques. *Journal of Atmospheric and Oceanic Technology*, **26**, 1910-1919.
21. Sukoriansky, S., and B. Galperin, 2009: Quasi-normal scale elimination theory of turbulence. *International Journal of Pure and Applied Mathematics,* **50**, 301-308.
22. Sukoriansky, S., N. Dikovskaya, N., and B. Galperin, 2008: Nonlinear waves in zonostrophic turbulence. *Physical Review Letters*, **101**, 178501.
23. Galperin, B., S. Sukoriansky, and N. Dikovskaya, 2008: Zonostrophic turbulence*. Physica Scripta***, T132 ,** 014034.
24. Sukoriansky, S., and B. Galperin, 2008: Anisotropic turbulence and internal waves in stably stratified flows (QNSE theory). Physica Scripta, **T132**, 014036.
25. Sukoriansky, S., N. Dikovskaya, N., and B. Galperin, 2007: On the "arrest" of inverse energy cascade and the Rhines scale. *Journal of the Atmospheric Sciences,* **64**, 3312-3327.
26. Galperin, B., S. Sukoriansky, and P.S. Anderson, 2007: On the critical Richardson number in stably stratified turbulence. *Atmospheric Science Letters,* **8**, 65-69, DOI: 10.1002/asl.153.
27. Galperin, B., S. Sukoriansky, N. Dikovskaya, P.L. Read, Y. Yamazaki, and R. Wordsworth, 2006: Anisotropic turbulence and zonal jets in rotating flows with a beta-effect. *Nonlinear Processes in Geophysics,* **13,** 83-98.
28. Sukoriansky, S., B. Galperin, and V. Perov, 2006: A quasi-normal scale elimination model of turbulence and its application to stably stratified flows. *Nonlinear Processes in Geophysics,* **13,** 9-22.
29. Sukoriansky, S., B. Galperin, and V. Perov, 2005: Application of a new spectral theory of stably stratified turbulence to atmospheric boundary layer over sea ice. *Boundary-Layer Meteorology,* **117,** 231-257.
30. Sukoriansky, S., B. Galperin, and I. Staroselsky, 2005: A quasi-normal scale elimination model of turbulent flows with stable stratification. *Physics of Fluids,* **17,** 085107.
31. Galperin, B., H. Nakano, H.-P. Huang, and S. Sukoriansky, 2004: The ubiquitous zonal jets in the atmospheres of giant planets and Earth's oceans. *Geophysical Research Letters,* **31,** L13303.
32. Hassid, S., and B. Galperin, 2004: A Comment on the Cheng, Canuto and Howard "An improved model for the Turbulent PBL". *Journal of the Atmospheric Sciences,* **61,** 1197-1199.
33. Sukoriansky, S., B. Galperin, and I. Staroselsky, 2003: Cross-term and ε-expansion in RNG theory of turbulence. *Fluid Dynamics Research,* **33,** 319-331.
34. Sukoriansky, S., B. Galperin, and N. Dikovskaya, 2002: Universal spectrum of two-dimensional turbulence on rotating sphere and some basic features of atmospheric circulations on giant planets. *Physical Review Letters,* **89,** 124501.
35. Galperin, B., S. Sukoriansky, and H.-P. Huang, 2001: Universal n^{-5} spectrum of zonal flows on giant planets. *Physics of Fluids,* **13,** 1545-1548.
36. Huang, H., B. Galperin, and S. Sukoriansky, 2001: Anisotropic spectra in two-dimensional turbulence on the surface of a rotating sphere. *Physics of Fluids,* **13,** 225-240.
37. Livingston, R., I. Lewis, G. Woodsum, X. Niu, B. Galperin, W. Huang, J. Christensen, M. Monaco, T. Battista, J. Klein, I. Howell, and G. Ray, 2000: Modelling oyster population response to variation in freshwater input. *Estuarine, Coastal & Shelf Science,* **50,** 655-672.
38. Sukoriansky, S., B. Galperin, and A. Chekhlov, 1999: Large-scale drag representation in simulations of two-dimensional turbulence. *Physics of Fluids,* **11,** 3043-3053.
39. Chekhlov, A., S. Orszag, S. Sukoriansky, B. Galperin, and I. Staroselsky, 1996: The effect of small-scale forcing on large-scale structures in two-dimensional flows. *Physica D,* **98,** 321-334.
40. Sukoriansky, S., A. Chekhlov, B. Galperin, S. Orszag, and I. Staroselsky, 1995: Large eddy simulation of two-dimensional isotropic turbulence. *Journal of Scientific Computing*, **11**(1), 13-45.
41. Hassid, S., and B. Galperin, 1994: Modeling rotating flows with neutral and unstable stratification. *Journal of Geophysical Research - Oceans,* **99,** 12,533 -12,548.
42. Chekhlov, A., S.A. Orszag, S. Sukoriansky, B. Galperin, and I., Staroselsky, 1994: Direct numerical simulation tests of eddy viscosity in two dimensions. *Physics of Fluids,* **6,** 2548-2550.
43. Galperin, B., S. Sukoriansky, and I. Staroselsky, 1993: Eddy Rossby wave frequency in beta-plane turbulence. *Physics of Fluids,* **5,** 2083-2085.
44. Blumberg, A., B. Galperin, and D. O'Connor, 1992: Modelling vertical structure of open channel flows. *ASCE Journal of Hydraulic Engineering,* **118,** 1119-1134.
45. Galperin, B., and G.L. Mellor, 1991: The effects of streamline curvature and spanwise rotation on near-surface, turbulent boundary layers. *Journal of Applied Mathematics and Physics (ZAMP),* **42,**

565-583.

46. Galperin, B., and G.L. Mellor, 1990: Time-dependent, three-dimensional model of the Delaware Bay and river system. Part 1: Description of the model and tidal analysis. *Estuarine, Coastal & Shelf Science,* **31,** 231-253.
47. Galperin, B., and G.L. Mellor, 1990: Time-dependent, three-dimensional model of the Delaware Bay and river system. Part 2: Three-dimensional flow fields and residual circulation. *Estuarine, Coastal & Shelf Science,* **31,** 255-281.
48. Galperin, B., and L.H. Kantha, 1990: Reply By Authors to G.D. Stubley and G. Riopelle. *AIAA Journal,* **28,** 1847.
49. Galperin, B., and L.H. Kantha, 1989: Turbulence model for rotating flows. *AIAA Journal,* **27,** 750-757.
50. Galperin, B., A. Rosati, L.H. Kantha, and G.L. Mellor, 1989: Modeling rotating stratified turbulent flows with application to oceanic mixed layers. *Journal of Physical Oceanography,* **19,** 901-916.
51. Kantha, L., A. Rosati, and B. Galperin, 1989: Effect of rotation on vertical mixing and associated turbulence in stratified fluids. *Journal of Geophysical Research,* **94,** 4843-4854.
52. Galperin, B., 1989: A second-moment closure model for MHD turbulence. *Journal of Applied Mathematics and Physics (ZAMP),* **40,** 740-757.
53. Galperin, B., L.H. Kantha, S. Hassid, and A. Rosati, 1988: A quasi-equilibrium turbulent energy model for geophysical flows. *Journal of the Atmospheric Sciences,* **45,** 55-62.
54. Hassid, S., and B. Galperin, 1986: A modified turbulent energy model for geophysical flows: Influence of the ground proximity. *Boundary-Layer Meteorology,* **35,** 155-165.
55. Galperin, B., 1986: A modified turbulent energy model for diffusion from elevated and ground point sources in neutral boundary layers. *Boundary-Layer Meteorology,* **37,** 245-262.
56. Hassid, S., and B. Galperin, 1984: A turbulent energy model for diffusion in the convective boundary layer. *Atmospheric Environment,* **18,** 1081-1089.
57. Hassid, S., and B. Galperin, 1984: A two-layer model for the barotropic stationary turbulent planetary boundary layer. *Israel Journal of Technology,* **22,** 233-242.
58. Hassid, S. and B. Galperin, 1983: A turbulent energy model for geophysical flows. *Boundary-Layer Meteorology,* **26,** 397-412.
59. Hassid, S., and B. Galperin, 1983: The development of the internal boundary layer in a stably stratified medium. *Israel Journal of Technology,* **21,** 214-220.
60. Merkulov, V., and B. Galperin, 1976: Stability of conductive magnetic liquid-metal suspension. *Magnetohydrodynamics,* **51,** 171-176.

13. BOOK CHAPTERS OR SEGMENTS OF A BOOK

1. Espa, S., G. Di Nitto, B. Galperin, J. Hoemann, 2019: Zonal Jets in Laboratory: Experiments with Electromagnetically Forced Flows. In: Zonal Jets, eds. B Galperin and P.L. Read, Cambridge University Press, pp. 167-177.
2. Galperin, B., S. Sukoriansky, R.M.B. Young, R. Chemke, Y. Kaspi, P.L. Read, N. Dikovskaya, 2019: Barotropic and Zonostrophic Turbulence. In: Zonal Jets, eds. B Galperin and P.L. Read, Cambridge University Press, pp. 220-237.
3. Galperin, B., S. Sukoriansky, S. Espa, G. Lacorata, N. Dikovskaya, J. Hoemann, 2019: Turbulence, Diffusion and Mixing Barriers in Flows with Zonal Jets. In: Zonal Jets, eds. B Galperin and P.L. Read, Cambridge University Press, pp. 450-460.
4. Read, P.L., B. Galperin, S.E. Larsen, S.R. Lewis, A. Määttänen, A. Petrosyan, N. Renno, H. Savijärvi, T. Siili, A. Spiga, A. Toigo, and L. Vázquez, 2017: The Martian Planetary Boundary Layer, pp. 172-202. Eds. R.M. Haberle, R.T. Clancey, F. Forget, M.D. Smith, and R.W. Zurek.
5. Sukoriansky, S., and B. Galperin, 2005: Subgrid- and supergrid-scale parameterization of turbulence in quasi-two-dimensional barotropic flows and the phenomenon of negative viscosity. In: Marine Turbulence - Theories, Observations and Models. Results of the CARTUM Project. Cambridge - New York: Cambridge University Press.
6. Galperin, B., and S. Sukoriansky, 2005: Energy spectra and zonal flows on beta-plane, rotating sphere, and giant planets. In: Marine Turbulence – Theories, Observations and Models. Results of the CARTUM Project. Cambridge - New York: Cambridge University Press.
7. Sukoriansky, S., and B. Galperin, 2005: A spectral closure model for turbulent flows with stable stratification. In: Marine Turbulence - Theories, Observations and Models. Results of the CARTUM Project. Cambridge - New York: Cambridge University Press.
8. Burwell, D., M. Vincent, M. Luther, and B. Galperin, 2000: Modeling residence times: Eulerian vs Lagrangian. In: Estuarine and Coastal Modeling, M. L. Spaulding and H. L. Butler, eds., ASCE, Reston, VA, pp 995-1009.

9. Burwell, D., M. Vincent, M. Luther, and B. Galperin, 2000: Modeling residence times: Eulerian vs Lagrangian, Estuarine and Coastal Modeling. Proceedings of the 6th International Conference, pp. 995-1009. New Orleans, La: ASCE.
10. Galperin, B., A. Squires, G. Vargo, K. Fanning, and R. Weisberg, 1995: Review and synthesis of historical Tampa Bay water quality data. Florida Scientist. Symposium on human impacts on the environment of Tampa Bay. Special publication, *Quarterly Journal of the Florida Academy of Sciences*, **58,** 228-233. Indialantic, Florida: Florida Academy of Sciences.
11. Galperin, B., S. Sukoriansky, and I. Staroselsky, 1994: Large-Scale Dynamics of Two-Dimensional Turbulence with Rossby Waves, Progress in Turbulence Research. *Progress in Astronautics and Aeronautics*, **162,** 108-120. Washington, DC: American Institute of Astronautics and Aeronautics.
12. Galperin, B., W.K. Jones , and T. Wu, 1993: Influence of Sikes Cut on Apalachicola Bay: A Preliminary Look at Two- and Three-Dimensional Modeling, 3rd International Conference on Estuarine and Coastal Modeling. Chicago, Illinois: ASCE.
13. Galperin, B., A.F. Blumberg, and R. Weisberg, 1992: The Importance of Density Driven Circulation in Well Mixed Estuaries: The Tampa Bay Experience, Estuarine and Coastal Modeling. Proceedings of the 2nd International Conference on Estuarine and Coastal Modeling/WW Div. ASCE, pp. 332-343, New York: ASCE.
14. Galperin, B., Blumberg, A. (1990). On the Summer Circulation in New York Bight and Contiguous Estuarine Waters, Coastal and Estuarine Studies*,* **38,** 451-468. New-York: Springer-Verlag, New York.
15. Galperin, B., and G.L. Mellor, 1990: Salinity intrusion and residual circulation in Delaware Bay during the drought of 1984: Residual currents and long-term transport. *Coastal and Estuarine Studies,* **38**, 469-480. New-york: Springer-Verlag New York, Inc.
16. Oey, L., G.L. Mellor, R. Hires, and B. Galperin, 1985: Three-Dimensional Numerical Models for Hindcasting or Forecasting Estuarine Tides, Currents and Salinities, Application of Real-Time Oceanographic Circulation Modeling. Washington D.C.: Marine Technology Society.

14. OTHER PUBLICATIONS

1. Sukoriansky, S., and Galperin, B., 2008: A quasi-normal scale elimination (QNSE) theory of turbulent flows with stable stratification and its application in weather forecast systems. 6th IASME/WSEAS International Conference on Heat Transfer, Thermal Engineering and Environment, August 20-22, 2008, Rhodes (Rodos) Island, Greece.
2. Galperin, B., and S. Sukoriansky, 2005: A new spectral theory of turbulent flows with stable stratification. *The Ringberg Workshop on Interdisciplinary Aspects of Turbulence, 18-22 April 2005,* Ringberg, Germany.
3. Galperin, B., S. Sukoriansky, and N. Dikovskaya, 2005: Anisotropic large-scale turbulence and zonal jets in computer simulations, in the laboratory, on giant planets and in the ocean. *Ringberg Workshop on Interdisciplinary Aspects of Turbulence, 18-22 April 2005,* Ringberg, Germany.
4. Vincent, M., M.E. Luther, D. Burwell, and B. Galperin, 2000: A numerical modeling investigation of a proposed desalination facility at Big Bend, Tampa Bay, Florida, Phases I and II: Model Calibration and Individual Effects. University of South Florida College of Marine Science, St. Petersburg, 597 pp.
5. Vincent, M., M.E. Luther, D. Burwell, and B. Galperin, 2000: A numerical modeling investigation of a proposed desalination facility at Big Bend, Tampa Bay, Florida, Phase III: Cumulative Effects. University of South Florida College of Marine Science, St. Petersburg, 388 pp.
6. Galperin, B., H.-P. Huang, and S. Sukoriansky, 1999: Anisotropic spectra in two-dimensional turbulence on a rotating sphere. *12th Conference on Atmospheric and Oceanic Fluid Dynamics.*
7. Vincent, M., D. Burwell, M.E. Luther, and B. Galperin, 1998: Real-time data acquisition and modeling in Tampa Bay. in Estuarine and Coastal Modeling, M. Spaulding and A. Blumberg, eds., ASCE, Reston, VA, pp 427-440.
8. Luther, M., Galperin, B., Vincent M., Burwell D., R. Pribble, and A. Janicki, 1998: Potential effects of Tampa Bay Water surface water projects on salinity and circulation in Tampa Bay: results of the use of the USF three-dimensional hydrodynamic model. Prepared for Tampa Bay Water by Post, Buckley, Schuh, and Jernigan, Inc.; Tampa, FL, 134 pp.
9. Schmidt, N., M. E. Luther, M. Vincent. B. Galperin, and D. Burwell, 1997: An Integrated End-to-End Marine Contaminant Management System for Tampa Bay. Presented at the Estuarine Research Federation 1997 Meeting, October 14, 1997, Providence, RI.
10. Schmidt, N., M. Vincent, M. E. Luther, and B. Galperin, 1997: Development of an end-to-end marine contaminant system. in Proceedings of the Bay Area Scientific Information Symposium 3, S. F.

Treat, ed., pp 25-41, Tampa Bay Regional Planning Council, St. Petersburg, FL.
11. Vincent, M., D. Burwell, M.E. Luther, and B. Galperin, 1997: Real-time data acquisition and modeling in Tampa Bay. *Proceedings of the 5th International Conference on Estuarine and Coastal Modeling,* 427-440.
12. Vincent, M., B. Galperin, and M.E. Luther, 1995: Development and application of a real-time three--dimensional hydrodynamic model of Tampa Bay, Florida. Presented at the Coastal Zone '95 Conference, Tampa, FL, July 17-22, 1995.
13. Sukoriansky, S., I. Staroselsky, and B. Galperin, 1993: Renormalization Group Theory of Turbulence and Waves on the Beta-Plane. *Proceedings of the Thirteenth Symposium on Turbulence, University of Missouri-Rolla.*
14. Galperin, B., S. Sukoriansky, S.A. Orszag, and I. Staroselsky, 1993: Non-eddy-resolving modeling of beta-plane turbulence. *Statistical Methods in Physical Oceanography. Proceedings of the 7th Aha Huliko'a Hawaiian Winter Workshop,* 421-452.
15. Galperin, B., A.F. Blumberg, and R. Weisberg, R., 1991: A Time-Dependent, Three-Dimensional Model of Circulation in Tampa Bay. *Proceedings, Tampa Bay Area Scientific Information Symposium,* **2,** 77-97.
16. Galperin, B., and L.H. Kantha, 1988: A Turbulence Model for Rotating Flows. *Proceedings of the First National Fluid Dynamics Congress.*

15. PRESENTATIONS

1. Galperin, B. Energy spectra in atmospheric and oceanic turbulence. Universality: Turbulence across Vast Scales, Flatiron Institute, New York, December 5, 2019.
2. Galperin, B. A new theory of oceanic and atmospheric energy spectra. Atmospheric, Oceanic & Planetary Physics, Oxford University, Oxford, UK, 2 October 2019.
3. Galperin, B. Zonal Jets – the Book and its Making. Faculty Seminar Series, CMS-USF, St. Petersburg, Florida, August 30, 2019.
4. Galperin, B. What determines the amplitudes and slopes of the energy spectra in geophysical flows? The 11th International Workshop on Modeling the Ocean - IWMO2019 Wuxi, China, 17 – 20 June, 2019.
5. Galperin, B. What determines the amplitudes and slopes of the energy spectra in flows with extra-strains? International Conference on Geophysical and Astrophysical Vortex Interactions, St Andrews, Scotland, UK, 11-14 June 2019.
6. Galperin, B. A New Theory of Oceanic and Atmospheric Kinetic Energy Spectra. Jet Propulsion Laboratory, Pasadena, CA, December 3, 2018.
7. Galperin, B. A New Theory of Oceanic and Atmospheric Energy Spectra. CMS – USF, October 23, 2018.
8. Galperin, B. Turbulence in Rotating Fluids, the Nastrom & Gage Spectra, and Turbulent Mixing in Geophysical Flows. Naval Research Laboratory, Stennis Space Center, MS, May 17, 2018.
9. Galperin, B. How QNSE Theory and Scatterometry Can Improve Various Data Products. International Ocean Vector Wind Science Team Meeting, Institute of Marine Sciences, Barcelona, April 24-26, 2018.
10. Galperin, B. Analytical Theory of Rotating Turbulent Flows and its Applications for Turbulence Diagnostics in Various Environments. Department of Mathematics, USF, Tampa, April 13, 2018.
11. Galperin, B. QNSE Theory of Turbulence in Rotating Fluids and the Nastrom & Gage Spectrum. International Workshop “Scales and Scaling Cascades in Geophysical Systems,” April 4-6, 2018, Haus des Sports, Hamburg, Germany.
12. Galperin, B. and S. Sukoriansky. QNSE Theory of Turbulence in Rotating Fluids and the Nastrom & Gage Spectrum. AGU Fall Meeting NG13A: Geophysical Fluid Dynamics II. Monday, 11 December 2017.
13. Galperin, B. Turbulence in Rotating Fluids and the Nastrom & Gage Spectra. International Workshop on Complex Turbulent Flows. Tangier, Morocco, 27-28 November, 2017.
14. Galperin, B. and S. Sukoriansky. Turbulence in Rotating Fluids and the Nastrom & Gage Spectrum. Turbulent Mixing and Beyond. Sixth International Conference, Tenth Anniversary Program the Abdus Salam International Centre for Theoretical Physics. Strada Costiera 11, Trieste, Italy, 14-18 August, 2017.
15. Galperin, B. Turbulence in Rotating Fluids and the Nastrom & Gage Spectrum. DICEA, Sapienza Universit`a di Roma, Rome, Italy, 19 June 2017.
16. Galperin, B. and S. Sukoriansky. Turbulence in Rotating Fluids and the Nastrom & Gage

Spectrum. Weizmann Institute of Science Rehovot, Israel, 18 May 2017.

17. Espa, S., B. Galperin, and G. Lacorata. Modeling planetary atmospheres and oceans in laboratory: Anisotropy in a westward zonal jet. 16th European Turbulence Conference, Stockholm, Sweden, 21-24 August, 2017.
18. Galperin, B. Turbulence anisotropisation and Nastrom & Gage spectra in rotating flows. Keynote address at the International Workshop on Turbulence in Stably Stratified Planetary Boundary Layers. Technical University of Delft, Netherlands, 28 March 2017.
19. Galperin, B. Turbulence anisotropisation and Nastrom & Gage spectra in rotating flows. The Dynamics of Rotating Fluids, UCL Department of Mathematics, London, England, 6 January 2017.
20. Galperin, B. Turbulence in various environments - from planets to laboratory. Faculty colloquium, Department of Mathematics, USF, 14 October, 2016.
21. Galperin, B. Why Laws of Physics for Fluid Flow Are Important in Marine Science. CMS – USF Faculty Seminar, 26 August, 2016.
22. Galperin, B. Westward jets and eddies: Nature and laboratory. IMA Conference on Turbulence, Waves and Mixing. In Honour of Lord Julian Hunt's 75th Birthday, Wednesday 6 – Friday 8 July 2016, King's College Cambridge, UK Cambridge University,
23. Galperin, B. Physical nature of the Nastrom & Gage atmospheric spectrum, its universality, and applicability as a benchmark in simulations of atmospheric circulation. The 4th International Workshop on Next-Generation NWP models. 25-27 May 2016, Jeju Island, South Korea.
24. Galperin, B. Recent developments with implementation of the QNSE-EDMF scheme in WRF. The 4th International Workshop on Next-Generation NWP models. 25-27 May 2016, Jeju Island, South Korea.
25. Galperin, B. Planetary turbulence and zonal jets: from oceans and giant planets to laboratory experiments and back. Environmental Fluid Dynamics Laboratory, Civil & Environmental Engineering & Earth Sciences, University of Notre Dame, IN, 13 October 2015.
26. Galperin, B. Westward jets and planetary turbulence: from laboratory studies to oceans and to giant planets. Department of Physics and Physical Oceanography, Memorial University of Newfoundland, St John's, Canada, 2 October 2015.
27. Galperin, B. Westward jets and eddies in nature and in a laboratory. Leverhulme Workshop, Atmospheric, Oceanic and Planetary Physics, Oxford University, Oxford, UK, 2 September 2015.
28. Galperin, B. Westward jets and eddies in nature and laboratory flows. Fundamental Aspects of Geophysical Turbulence II. National Center for Atmospheric Research, Boulder, CO, 6 August 2015.
29. Galperin, B. Westward jets and eddies in nature and laboratory flows. National Oceanography Centre, University of Southampton, Southampton, UK, 15 June 2015.
30. Galperin, B. Westward jets and eddies in nature and in a laboratory. School of Computing and Mathematics, Keele University, Keele, UK, 3 June 2015.
31. Galperin, B. Anisotropic turbulence and zonal jets on giant planets, in the ocean and in a laboratory. Planetary Sciences Group, Department of Physics, University of Central Florida, Orlando, Florida, 3 April 2015.
32. B. Galperin. A laboratory study of anisotropic turbulence and Lagrangian diffusion on a westward jet - and a novel method of analyzing macroturbulence. Naval Research Laboratory, Stennis Space Center, MS, 5 March 2015.
33. Galperin, B. An experimental study of anisotropic turbulence and Lagrangian diffusion in an easterly jet - and a novel method of analyzing macroturbulence. Rosenstiel School of Marine and Atmospheric Science, University of Miami, 11 November 2014.
34. Galperin, B., J. Hoemann, S. Espa, and G. Di Nitto. A laboratory study of anisotropic turbulence and Lagrangian diffusion in an easterly jet - and a novel method of analyzing macroturbulence. The Dynamics of Rotating Fluids. Atmospheric, Oceanic and Planetary Physics, University of Oxford, UK, 26 September 2014.
35. Galperin, B., J. Hoemann, S. Espa, and G. Di Nitto. Anisotropic turbulence and Rossby waves in an easterly jet - an experimental study. BIT's 1st Annual World Congress of Geophysics – 2014, Taiyuan, China, 16 – 18 September, 2014.
36. Galperin, B. Waves, Turbulence, Boundary Layers, and All That… CMS Faculty Seminar Series, St. Petersburg, Florida, September 5, 2014.
37. Galperin, B., J. Hoemann, S. Espa, and G. Di Nitto. Anisotropic turbulence and Rossby waves in an easterly jet - an experimental study. Turbulent Mixing and Beyond, Fourth International Conference, The Abdus Salam International Centre for Theoretical Physics, Strada Costiera 11, Trieste, Italy, 4 - 9 August, 2014.
38. Galperin, B. Air, Water, Fire, Earth, Space. Faculty Seminar Series CMS Faculty Research: Meet

and Greet. St. Petersburg, August 30, 2013.

39. Galperin, B., S. Sukoriansky, N. Dikovskaya, R.M.B. Young, P.L. Read, A.J. Lancaster, and D. Armstrong, Zonostrophic macroturbulence and flow energetics on Jupiter from Cassini data. Weizmann Institute of Science, Rehovot, Israel, August 14, 2013.
40. Galperin, B., S. Sukoriansky, N. Dikovskaya, R.M.B. Young, P.L. Read, A.J. Lancaster, and D. Armstrong, The Regime of Zonostrophic Macroturbulence and Its Application for Characterization of Large-Scale Circulation on Jupiter and Other Giant Planets. *Crossing the Boundaries in Planetary Atmospheres: From Earth to Exoplanets.* The AGU Chapman Conference, Annapolis, MD, June 24-28, 2013.
41. Galperin, B. Zonal jets and eddies – planetary science and satellite oceanography at the crossroads – Second meeting. International Space Science Institute, Bern, Switzerland, April 2, 2013.
42. Galperin, B., S. Sukoriansky, N. Dikovskaya, R.M.B. Young, P.L. Read, A.J. Lancaster, and D. Armstrong, Macroturbulence on Jupiter as emerging from Cassini data. Geostrophic Turbulence and Active Tracer Transport in 2 Dimensions**,** Princeton Center for Theoretical Science, Princeton University, March 13-15, 2013.
43. Galperin, B., S. Sukoriansky, QNSE theory of anisotropic turbulence and dispersive waves in stably stratified atmosphere and oceans. Wave-Turbulence Interactions in Stable Atmospheric Boundary Layers (WINABL), July 23-27, 2012. National Center for Atmospheric Research, Boulder, Colorado.
44. Galperin, B., S. Sukoriansky, N. Dikovskaya, Rossby waves and zonons in zonostrophic turbulence. British Applied Mathematics Colloquium, 28 March, 2012.
45. Galperin, B., Zonal jets and eddies – planetary science and satellite oceanography at the crossroads. International Space Science Institute, Bern, Switzerland, March 5, 2012.
46. Galperin, B., S. Sukoriansky, N. Dikovskaya, Mean flows and waves in beta-plane turbulence. 2012 Ocean Sciences Meeting, Salt Lake City, 23 February 2012.
47. Galperin, B., S. Sukoriansky, N. Dikovskaya, Rossby waves and solitary waves (zonons) in β-plane turbulence. Rotating Fluids 2012. University College London, 6 January 2012.
48. Galperin, B., S. Sukoriansky, N. Dikovskaya, Rossby waves and solitary waves (zonons) in β-plane turbulence. AGU Fall Meeting 2011. San-Francisco, December 8, 2011.
49. Galperin, B., S. Sukoriansky, N. Dikovskaya, Rossby waves and zonons in zonostrophic turbulence. Atmospheric, Oceanic and Planetary Physics, University of Oxford, November 25, 2011.
50. Galperin, B., S. Sukoriansky. An analytical theory of the Kolmogorov-buoyancy subrange transition in stably stratified turbulent flows. Turbulent Mixing and Beyond, Third International Conference The Abdus Salam International Centre for Theoretical Physics. Strada Costiera 11, 34014 Trieste, Italy, 21 - 28 August, 2011.
51. Galperin, B., S. Sukoriansky, J. Pergaud, Hybrid QNSE-EDKF model of PBL in WRF. NWP Workshop on Model Physics with an Emphasis on Short-Range Prediction, Washington D.C., July 26-28, 2011.
52. Galperin, B., S. Sukoriansky, N. Dikovskaya, Zonostrophic turbulence, zonal jets and mixing barriers. 2011 Program of Study in Geophysical Fluid Dynamics Woods Hole Oceanographic Institution Woods Hole, 18 July 2011.
53. Galperin, B., S. Sukoriansky. An analytical theory of the Kolmogorov-buoyancy subrange transition in stably stratified turbulent flows. Department of Civil and Environmental Engineering DICEA, Sapienza Università di Roma, Italy. 5 July 2011.
54. Galperin, B., S. Sukoriansky, N. Dikovskaya, Zonostrophic turbulence, zonal jets and mixing barriers. Department of Civil and Environmental Engineering DICEA, Sapienza Università di Roma, Italy, 4 July 2011.
55. Sukoriansky, S., N. Dikovskaya, B. Galperin, Nonlinear waves (zonons) in zonostrophic turbulence. Waves and instabilities in space and astrophysical plasmas. Eilat, June 19-24, 2011.
56. Galperin, B., S. Sukoriansky. An analytical theory of the Kolmogorov-buoyancy subrange transition in stably stratified turbulent flows. Imperial College, London. 16 June 2011.
57. Galperin, B., S. Sukoriansky. An analytical theory of the Kolmogorov-buoyancy subrange transition in stably stratified turbulent flows. Wave-flow interactions A network in mathematics: fourth meeting. Cambridge University, 11-15 April 2011.
58. Galperin, B., S. Sukoriansky, N. Dikovskaya, Zonostrophic turbulence, zonal jets and the mixing barriers. Department of Meteorology, University of Reading, Reading, UK, 6 January 2011.
59. Galperin, B., S. Sukoriansky, N. Dikovskaya, Zonostrophic turbulence, zonal jets and the mixing barriers. Faculty of Engineering, Tel-Aviv University, 19 December 2010.
60. Galperin, B., S. Sukoriansky, Turbulence-wave interaction in flows with stable stratification:

spectral viewpoint. *Topographic internal waves in the atmosphere and ocean* Cargèse (Corsica), France, November 2-11, 2010.

61. Galperin, B., S. Sukoriansky, N. Dikovskaya, Zonostrophic turbulence, zonal jets and the mixing barriers. RSMAS, University of Miami, 15 October 2010.
62. Galperin, B., S. Sukoriansky, J. Pergaud, Current state of QNSE PBL model in WRF. The Third International Workshop on Next-Generation NWP Models. 29 August –1 September 2010, Jeju Island, Korea.
63. Galperin, B., S. Sukoriansky, Diffusion of momentum and scalar in anisotropic 2D and 3D turbulence with dispersive waves. Wave-flow interactions. A network in mathematics: third meeting. University of St Andrews, 14-18 June 2010.
64. Galperin, B., S. Sukoriansky, Zonal jets and nonlinear waves in turbulence with a β-effect. Laboratoire de Météorologie Dynamique Ecole Normale Supérieure Paris, France, June 30, 2010.
65. Galperin, B., S. Sukoriansky, Zonal jets and nonlinear waves in turbulence with a β-effect. National Oceanography Centre, University of Southampton, March 10, 2010, UK.
66. Galperin, B., S. Sukoriansky, Transport of momentum and scalars in anisotropic turbulence with dispersive waves. 2010 Ocean Sciences Meeting, 22-26 February 2010, Portland, Oregon.
67. Galperin, B., S. Sukoriansky, Turbulent transport of momentum and scalars in geophysical flows. Department of Mathematics, Imperial College London, January 26, 2010, UK.
68. Galperin, B., S. Sukoriansky, Turbulent transport of momentum and scalars in geophysical flows. Department of Applied Mathematics and Theoretical Physics, University of Cambridge, Cambridge, December 21, 2009, UK.
69. Galperin, B., S. Sukoriansky, Turbulent transport processes in atmospheres and oceans. Department of Atmospheric, Oceanic and Planetary Physics, Oxford University, Oxford, November 19, 2009, UK.
70. Galperin, B., S. Sukoriansky, Turbulent transport of momentum and scalars in geophysical flows. Ocean-Atmosphere Energy Transport Conference, Caltech, November 5-7, 2009, Pasadena, California.
71. Galperin, B., S. Sukoriansky, Modeling of turbulent transfer of momentum and scalars in geophysical flows. NRL – Stennis Space Center, October 28, 2009, Mississippi.
72. Galperin, B., S. Sukoriansky, and N. Dikovskaya, Turbulent diffusion of momentum and scalar in flows with internal and Rossby waves. 9th EMS Annual Meeting, 28 September – 02 October, 2009, Meteo France, Toulouse, France.
73. Sukoriansky, S., B. Galperin, and N. Dikovskaya, Turbulent transport and waves in zonostrophic turbulence, EUROMECH European Turbulence Conference ETC12, Marburg, September 2009, Germany.
74. Galperin, B., S. Sukoriansky, Transport of momentum and tracers in the turbulent ocean. National Oceanography Centre, Southampton, August 5, 2009, UK.
75. Galperin, B., S. Sukoriansky, Large-scale and small-scale mixing in turbulence with anisotropic dispersive waves. National Institute of Biology, Piran, Slovenia, July 29, 2009.
76. Galperin, B., S. Sukoriansky, Anisotropic large-scale circulation and transport in zonostrophic turbulence, Tutorial. Turbulent Mixing and Beyond. International Conference and Advanced School The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy, 27 July - 07 August, 2009.
77. Sukoriansky, S., and B. Galperin, A quasi-normal theory of turbulence and its applications in geophysical fluid dynamics, Tutorial. Turbulent Mixing and Beyond. International Conference and Advanced School The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy, 27 July - 07 August, 2009.
78. Galperin, B., S. Sukoriansky, and A. Grantinger, Verification of the QNSE turbulence model in WRF. WRF PBL working group meeting, June 23, 2009, NCAR, Boulder, Colorado.
79. Galperin, B., and S. Sukoriansky, Large-scale and small-scale mixing in turbulence with anisotropic dispersive waves. Physical Oceanography Review Symposium, June 9, 2009, Chicago, IL.
80. Galperin, B., and S. Sukoriansky, Transport of momentum and scalar in turbulent flows with anisotropic dispersive waves. Wave-flow interactions, E-Science Institute, University of Edinburgh, Edinburgh, UK, May 26, 2009.
81. Galperin, B., and S. Sukoriansky, Transport of momentum and scalar in turbulent flows with anisotropic dispersive waves. The Technion – Israel Institute of Technology, May 18, 2009, Haifa, Israel.
82. Galperin, B., and S. Sukoriansky, Transport of momentum and scalar in turbulent flows with anisotropic dispersive waves. University College London, April 27, 2009, London, England.

83. Galperin, B., and S. Sukoriansky, A quasi-normal scale elimination (QNSE) theory of stably stratified turbulence. Invited presentation at the Workshop on Modeling the Ocean: Dynamics, Syntheses & Predictions. February 23-26, 2009, Taipei, Taiwan.
84. Galperin, B., S. Sukoriansky, and N. Dikovskaya, Nonlinear waves (zonons) in zonostrophic turbulence. Invited presentation at the Workshop on Modeling the Ocean: Dynamics, Syntheses & Predictions. February 23-26, 2009, Taipei, Taiwan.
85. Galperin, B., and S. Sukoriansky. Advanced parameterization and modeling of turbulent atmospheric boundary layers. Army Atmospheric Sciences Overview Rayleigh-Durham, NC, February 4, 2009.
86. Galperin, B., S. Sukoriansky, and N. Dikovskaya. Nonlinear waves (zonons) in zonostrophic turbulence. Invited presentation at the Workshop on Structures and Waves in Anisotropic Turbulence. Warwick Mathematics Institute, Warwick University, November 6, 2008, Warwick, UK.
87. Galperin, B., and S. Sukoriansky, QNSE theory of stably stratified turbulence. A tutorial of four 1.5 lectures at the Meteorology Department, Penn State University, October 27-28, 2008**,** University College Park, Pennsylvania.
88. Galperin, B., S. Sukoriansky, and E. Atlaskin. QNSE-based surface layer parameterization in simulations of stably stratified atmospheric boundary layers. 8th Annual Meeting of the European Meteorological Society, October 1, 2008, Amsterdam, The Netherlands.
89. Sukoriansky, S., and B. Galperin. Quasi-normal scale elimination (QNSE) theory of turbulence.Invited presentation at the Fifth International conference on Applied Mathematics and Computing, August 12-18, 2008, Plovdiv, Bulgaria.
90. Sukoriansky, S., and B. Galperin. A quasi-normal scale elimination (QNSE) theory of turbulent flows with stable stratification and its application in weather forecast systems. 6th IASME/WSEAS International Conference on Heat Transfer, Thermal Engineering and Environment, August 20-22, 2008, Rhodes (Rodos) Island, Greece.
91. Galperin, B., and S. Sukoriansky. A quasi-normal scale elimination (QNSE) model of stably stratified turbulence and its implementation in oceanography and meteorology. Invited presentation at Meteo France, July 23, 2008, Toulouse, France,
92. Galperin, B., and S. Sukoriansky. A quasi-normal scale elimination (QNSE) model of stably stratified turbulence and its implementation in oceanography and meteorology. Invited presentation at the Department of Atmospheric, Oceanic and Planetary Physics, Oxford University, July 16, 2008, Oxford, UK.
93. Galperin, B., and S. Sukoriansky. A quasi-normal scale elimination (QNSE) model of stably stratified turbulence and its implementation in oceanography and meteorology. Invited presentation at the UK Met Office, July 9, 2008, Exeter, UK.
94. Galperin, B., and S. Sukoriansky. A quasi-normal scale elimination (QNSE) model of stably stratified turbulence and its implementation in oceanography and meteorology. Invited presentation at the European Centre for Medium-Range Weather Forecasts, July 3, 2008, Reading, England.
95. Sukoriansky, S., and B. Galperin. QNSE-based turbulence model and surface layer parameterization and their implementation in WRF. WRF PBL working group meeting, June 23, 2008, NCAR, Boulder, Colorado.
96. Galperin, B., and S. Sukoriansky. A quasi-normal scale elimination (QNSE) theory of stably stratified turbulence. Invited presentation at the Seminar on new developments in modelling ABLs for NWP**,** Finnish Meteorological Institute, June 17, 2008, Helsinki, Finland.
97. Atlaskin, E., S. Sukoriansky, and B. Galperin. Implementation of the QNSE-based PBL scheme and surface layer parameterization in HIRLAM. 18th Symposium on Boundary Layers and Turbulence, 9-13 June 2008, Stockholm, Sweden.
98. Galperin, B., and S. Sukoriansky. A quasi-normal scale elimination (QNSE) model of stably stratified turbulence and its implementation in oceanography and meteorology. Invited presentation at the Czech Meteorological and Hydrological Institute, May 22, 2008, Prague, Czech Republic.
99. Galperin, B., and S. Sukoriansky A quasi-normal scale elimination (QNSE) model of stably stratified turbulence and its implementation in oceanography and meteorology. Invited presentation at the Institute for Atmospheric and Climate Science, May 19, 2008, ETH-Zurich, Switzerland.
100. Galperin, B., S. Sukoriansky, and N. Dikovskaya. Zonostrophic turbulence in various environments. Invited presentation at the International Space Science Institute Bern, Switzerland, May 14, 2008.
101. Galperin, B., and S. Sukoriansky. A quasi-normal scale elimination (QNSE) model of stably

stratified turbulence and its implementation in oceanography and meteorology. Invited presentation at the International Space Science Institute Bern, Switzerland, May 13, 2008.

102. Galperin, B., S. Sukoriansky, and N. Dikovskaya. Zonostrophic turbulence – A paradigm of zonation in the Earth's oceans and on giant planets. 2008 AGU Ocean Sciences Meeting, March 2-7, 2008, Orlando, Florida.
103. Galperin, B., S. Sukoriansky, and N. Dikovskaya. Zonostrophic turbulence in various environments. Workshop on zonal jets in rotating turbulent flows of cryogenic helium, February 25-26, 2008, USF, St. Petersburg, Florida.
104. Galperin, B., Sukoriansky, S., and Perov, V., A quasi-normal scale elimination (QNSE) model of stably stratified turbulence and its implementation in oceanography and meteorology. Technion – Israel Institute of Technology, Haifa, November 21, 2007, Israel.
105. Galperin, B., Sukoriansky, S., Zonostrophic turbulence: A paradigm of zonation in the Earth's oceans and on giant planets. Applied Physics Laboratory, University of Washington, Seattle, November 9, 2007
106. Galperin, B., Sukoriansky, S., A quasi-normal scale elimination (QNSE) theory of turbulent flows with stable stratification and its application in oceanography and meteorology. Applied Physics Laboratory, University of Washington, Seattle, November 8, 2007.
107. Galperin, B., Sukoriansky, S., Zonostrophic turbulence: A paradigm of zonation on giant planets and in the Earth's oceans. The NASA Workshop on Planetary Atmospheres, Greenbelt, Maryland, November 6–7, 2007.
108. Galperin, B., Sukoriansky, S., and Perov, V*., Implementation of the quasi-normal scale elimination (QNSE) turbulence theory in HIRLAM and WRF*. 7th European Meteorological Society Annual Meeting at San Lorenzo de El Escorial, Spain, 1–5 October 2007.
109. Sukoriansky, S., Galperin, B., and Perov, V., *A Quasi-Normal Scale Elimination (QNSE) theory of turbulent flows with stable stratification*. 18th French Congress on Mechanics, August 27-31, Grenoble, France.
110. Sukoriansky, S., Galperin, B., and Perov, V., *Anisotropic turbulence and internal waves in stably stratified flows (QNSE theory).* International conference "Turbulent mixing and beyond," the Abdus Salam International Center for Theoretical Physics, August 17-26, Trieste, Italy.
111. Galperin, B., Sukoriansky, S., and Dikovskaja, N., *Zonostrophic turbulence*. International conference "Turbulent mixing and beyond," the Abdus Salam International Center for Theoretical Physics, August 17-26, Trieste, Italy.
112. Galperin, B., Sukoriansky, S., and Perov, V., *A quasi-normal scale elimination (QNSE) model of stably stratified turbulence.* WRF PBL working group meeting June 11 – 15, 2007, Boulder, Colorado.
113. Galperin, B., Sukoriansky, S., and Perov, V., *Implementation of the quasi-normal scale elimination (QNSE) turbulence model in WRF.* WRF PBL working group meeting June 11 – 15, 2007, Boulder, Colorado.
114. Galperin, B., Sukoriansky, S., Perov, V., and Anderson, P.S., *A spectral model of stably-stratified flows.* ARENA workshop "Site testing at Dome C," Rome, June 11-13, 2007 (presented by Phil Anderson).
115. Galperin, B., and Sukoriansky, S., *A quasi-normal scale elimination (QNSE) theory of stably stratified turbulence.* 39th International Liège Colloquium on Ocean Dynamics, Liège, Belgium, May 11, 2007.
116. Perov, V., Sukoriansky, S., Galperin, B., *Atmospheric surface layer parameterization in a weather prediction system HIRLAM.* European Geosciences Union General Assembly 2007, Vienna, Austria, 15 – 20 April 2007.
117. Galperin, B., Sukoriansky, S., Dikovskaya, N., *Zonostrophic Turbulence.* Workshop on 2D turbulence, Lorentz Center, University of Leiden, Leiden, The Netherlands, March 2007.
118. Perov, V., Galperin, B., Sukoriansky, S., *Implementation of the quasi-normal scale elimination theory of turbulence in HIRLAM: Influence on prediction PBL clouds and turbulent fluxes.* CBL07/ NetFAM meeting at Meteo-France, Toulouse, France, March 2007.
119. Sukoriansky S., Galperin B., *2D turbulence in the energy subrange as a non-linear Kuramoto-Sivashinsky syste.* Workshop on 2D turbulence, Lorentz Center, University of Leiden, Leiden, The Netherlands, March 2007.
120. Galperin, B., Sukoriansky, S., Dikovskaya, N., *Inverse energy cascade, the Rhines scale, Rossby-Haurwitz waves, and large-scale circulations on giant planets and in the terrestrial oceans.* Institute for Mathematical Sciences and Department of Aeronautics, Imperial College London, UK, February 2007.
121. Galperin, B., Sukoriansky, S., Dikovskaya, N., *On the "arrest" of inverse energy cascade and the Rhines's scale*. 59th Annual Meeting of the APS Division of Fluid Dynamics, Tampa, Florida,

November 2006.

122. Galperin, B., Sukoriansky, S., Perov, V., *Quasi-normal spectral closure in stably-stratified flows.* Sedona, Arizona, November 2006.
123. Galperin, B., Sukoriansky, S., Perov, V., *QNSE-based parameterizations in WRF and HIRLAM*. Sedona, Arizona, November 2006.
124. Galperin, B., Sukoriansky, S., *A new spectral theory of turbulent flows with stable stratification*. Old Dominion University, Norfolk, Virginia, November 2006.
125. Galperin, B., S. Sukoriansky, N. Dikovskaya, *Inverse energy cascade, the Rhines scale, Rossby waves, and large-scale circulations on giant planets and in the terrestrial oceans*. NCAR/UCAR, Boulder, Colorado, October 2006.
126. Sukoriansky, S., Galperin, B., *A new spectral theory of turbulent flows with stable stratification.* UCAR/ NCAR, Boulder, Colorado, October 2006.
127. Sukoriansky, S., Galperin, B., Perov, V. *A new spectral theory of turbulence and heat transfer in stably stratified flows*. Fifth International Symposium on Turbulence, Heat and Mass Transfer, Dubrovnik, Croatia, September 2006.
128. Galperin, B., S. Sukoriansky, N. Dikovskaya, *Inverse energy cascade, the Rhines scale, and large-scale circulations on giant planets and in the terrestrial oceans*. Department of Applied Mathematics and Theoretical Physics, Cambridge University, UK, July 2006.
129. Galperin, B., *A quasi-normal scale elimination (QNSE) theory of turbulence.* Monterey, CA: Naval Research Laboratory, May 2006.
130. *Implementation of the quasi-normal scale elimination theory in models of ABLs.* San Diego, CA: American Meteorological Society, May 2006.
131. Galperin, B., Sukoriansky, S., Perov, V., *A quasi-normal scale elimination (QNSE) theory of turbulence ABLs.* Dubrovnik, Croatia: NATO Conference.
132. Galperin, B., Sukoriansky, S., Perov, V., *Implementation of the quasi-normal scale elimination theory of turbulence in a regional weather prediction model HIRLAM*. EGU Assembly, Vienna, April 2006.
133. Galperin, B., Sukoriansky, S., Dikovskaya, N., *Anisotropic turbulence, waves and zonal jets on the surface of a rotating sphere.* Honolulu, HI: American Geophysical Union - Ocean Sciences, February 2006.
134. Galperin, B., *Anisotropic Large-Scale Turbulence, Waves and Zonal Jets in Flows with Beta-Efect.*Honolulu, HI: University of Hawaii, February 2006.
135. Galperin, B., Sukoriansky, S., Dikovskaya, N., *Anisotropic Large-Scale Turbulence, Waves, and Zonal Jets in Flows with Beta-Effect.* Savannah, GA: American Geophysical Union - Chapman Conference, January 2006.
136. Galperin, B., *A Spectral Model of Turbulent Flows with Stable Stratification and its Application for Geophysical Flows.* Princeton, NJ: Princeton University, June 2005.
137. Galperin, B., *Anisotropic large-scale turbulence and zonal jets in computer simulations, in the laboratory, on giant planets and in the ocean.* MIT, Cambridge, MA, June 2005.
138. Galperin, B., Sukoriansky, S., Dikovskaya, N., *Zonal jets and anisotropic turbulence in natural and laboratory flows.* Cambridge, MA: American Meteorological Society, 15th Conference on Atmospheric and Oceanic Fluid Dynamics, June 2005,
139. Galperin, B., *A new spectral theory of turbulent flows with stable stratification and its applications.* Videoconference at St. Petersburg, FL: Army Research Office, May 2005.
140. Galperin, B., Sukoriansky, S., Dikovskaya, N., *Anisotropic large-scale turbulence and zonal jets in computer simulations, in the laboratory, on giant planets and in the ocean.* Ringberg, Germany: Max-Planck-Institute for Astrophysics, April 2005.
141. Galperin, B., Sukoriansky, S., *A new spectral theory of turbulent flows with stable stratification.* Ringberg, Germany: Max-Planck-Institute for Astrophysics, April 2005.
142. Galperin, B., Sukoriansky, S., Dikovskaya, N., *Zonal jets and anisotropic energy spectrum in beta-plane turbulence: computer simulations, laboratory experiments, and natural flows.* Vienna, Austria: EGU Assembly, April 2005.
143. Galperin, B., Sukoriansky, S., *A spectral closure-based model of turbulence for geophysical applications.* Vienna, Austria: EGU General Assembly, April 2005.
144. Galperin, B., *A spectral theory for stably stratified turbulence.* Haifa, Israel: Technion - Israel Institute of Technology, 2005.
145. Galperin, B., *Anisotropic large-scale turbulence and zonal jets in computer simulations, in the laboratory, on giant planets and in the ocean.* Florida State University, Tallahassee, Florida, November 2004.
146. Galperin, B., Sukoriansky, S., Perov, V., *A coarse-grain, quasi-normal model of stably stratified turbulent flows and its implementation in K-ε modeling of atmospheric ABLs*. Portland, ME:

American Meteorological Society, August 2004.

147. Galperin, B., Sukoriansky, S., Nakano, H., *Anisotropic Large - Scale Turbulence on Giant Planets and in the Ocean.* Warsaw, Poland: XXI International Congress of Theoretical and Applied Mechanics, August 2004.
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154. Galperin, B., *A new spectral theory of turbulence with stable stratification.* London, UK: Imperial College, February 2004.
155. Galperin, B., *Anisotropic turbulence and zonal flows on rotating sphere, giant planets, and in Earth's ocean*. Imperial College, London, UK, February, 2004.
156. Galperin, B., Sukoriansky, S., Perov, V., *Anisotropic turbulence and waves in large-scale geophysical flows.* Tel-Aviv, Israel: Israel Society of Theoretical and Applied Mechanics (ISTAM2003), December 2003.
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159. Luther, M. E., B. Galperin, S. D. Meyers, S. A. Gilbert, V. Subramanian, L. M. Wetzell, M. A. Vincent, and M. E. Hansen, *An Integrated Observing and Modeling System for Tampa Bay, Florida*. Presented at the Fourth Tampa Bay Area Scientific and Information Symposium (BASIS4), St. Petersburg, FL, October 2003.
160. Galperin, B., Sukoriansky, S., Perov, V. (2003). *Application of a new spectral theory of stratified turbulence to ABL over ice.* Mallorca, Spain: GEWEX Atmospheric Boundary Layer Study (GABLS) Workshop, September 2003.
161. Galperin, B., *A quasi-normal spectral model of turbulent flows with stable stratification.* Department of Applied Mathematics and Theoretical Physics, University of Cambridge, England, July 2003.
162. Galperin, B., *Anisotropic turbulence and zonal jets on beta -plane, rotating sphere and giant planets.* Southampton, UK: Southampton Oceanographic Center, July 2003.
163. Sukoriansky, S., Galperin, B., Perov, V., *A spectral closure model for turbulent flows with stable stratification - theory and a test case of atmospheric SBL.* Technion - Haifa, Israel: Faculty of Mechanical Engineering, Technion, Israel, 2003.
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166. Galperin, B., *Anisotropic Turbulence and Zonal Jets on Beta-Plane, Rotating Sphere and Giant Planets.* Cambridge, England: Department of Applied Mathematics and Theoretical Physics, Cambridge University, July 2002.
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Planets. Oxford, England: Atmospheric, Oceanic & Planetary Physics, Clarendon Laboratory, Oxford University, July 2002.

170. Galperin, B., *Universal Spectrum of Two-Dimensional Turbulence on Rotating Sphere and Basic Features of Atmospheric Circulations on Giant Planets.* Nice, France: the 27th General Assembly of the European Geophysical Society, April 2002.
171. Galperin, B., *RPT Analysis of Turbulent Flows with Stable Stratification.* Nice, France: the 27th General Assembly of the European Geophysical Society, April 2002.
172. Galperin, B., *Zonal Flows on Beta-Plane, Rotating Sphere, and Giant Planets.* Baltimore, Maryland: Department of Earth and Planetary Sciences, The Johns Hopkins University, March 2002.
173. Galperin, B., *Zonal Flows on Beta-Plane, Rotating Sphere, and Giant Planets.* St. Petersburg, Florida: College of Marine Science, University of South Florida, January 2002.
174. Galperin, B., *A Closer Look at Wave-Turbulence Interactions in Stably Stratified Flows.* Brussels, Belgium: 7th CARTUM Meeting, December 2001.
175. Galperin, B., *Spectral Characteristics of Zonal Flows on Giant Planets.* Brussels, Belgium: 7th CARTUM Meeting, December 2001.
176. Galperin, B. (2001). *Spectral Characteristics of Zonal Flows on Giant Planets.* New Orleans, Louisiana: 33rd Annual Meeting, Division for Planetary Sciences, American Astronomical Society, November 2001.
177. Luther, M. E., M. S. Vincent, D. C. Burwell, and B. Galperin, *Numerical modeling of proposed fresh water withdrawals and desalination concentrate discharges in Tampa Bay, Florida*. Presented at the 16th Biennial Conference of the Estuarine Research Federation, St. Petersburg Beach, FL, November 8, 2001.
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179. Galperin, B., *Universal n^{-5} spectrum of zonal flows on giant planets.* University College London, London, England: Department of Space and Climate Physics and Department of Mathematics, May 2001.
180. Galperin, B., *Universal n^{-5} spectrum of zonal flows on giant planets.* Budapest, Hungary: CARTUM Workshop III, May 2001.
181. Galperin, B., *Applications of the Boltzmann Lattice Method.* Budapest, Hungary: CARTUM Workshop III, May 2001.
182. Galperin, B., *Universal n^{-5} spectrum of zonal flows on giant planets.* Washington, DC: the 53rd Annual Meeting of the Division of Fluid Dynamics of the American Physical Society, November 2000.
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184. Galperin, B., *Coupled hydrodynamic-biological simulations of the oyster beds in Apalachicola Bay,Florida, in response to changes in reshwater runof.* Marseille, France: 2nd CARTUM Workshop, 2000.
185. Luther, M.E., Galperin, B.*, A numerical modeling investigation of a proposed desalination facility at Big Bend, Tampa Bay, Florida,Phase I and II.* St. Petersburg, Florida: S & W Water LLC, January 2000.
186. Burwell, D., M. Vincent, M. Luther, and B. Galperin, *Modeling of estuarine residence times*. Presented at the 6th International Conference on Estuarine and Coastal Modeling, New Orleans, LA, November 3-5, 1999.
187. Galperin, B., *2-D turbulence and flow two-dimensionalization, Parts I and I.* Ispra, Italy: CARTUM Autumn School, October 1999.
188. Galperin, B., *Anisotropic spectra in two-dimensional turbulence on a rotating sphere.* New York: 12th Conference on Atmospheric and Oceanic Fluid Dynamics, Columbia University, June 1999.
189. Galperin, B., *Negative viscosity, large scale drag, zonal jets and anisotropic spectra in simulations of 2D and rotating sphere turbulence.* Princeton, NJ: GFDL/NOAA, Princeton University, 1999.
190. Galperin, B., *Negative viscosity, large scale drag, zonal jets and anisotropic spectra in DNS of 2D turbulence.* Hamburg, Germany: CARTUM Kick-Off Workshop, 1999.
191. Galperin, B., *Anisotropic -5/3 and -5 spectra in differentially rotating barotropic 2D turbulence.* Philadelphia, Pennsylvania: the 51 st Annual Meeting of the Division of Fluid Dynamics of the American Physical Society, November 1998.
192. Galperin, B., *Large Eddy Simulation (LES) in Geophysical Flows: Recent Developments.* Southampton, England: the Southampton Oceanographic Centre, December 1997.
193. Galperin, B., *Nowcasting and Forecasting of Tampa Bay Water Levels and Currents.* Clearwater, Florida: BASIS 3, October 1997.
194. Galperin, B., *Recent Developments in Modeling and Predicting Storm Surges.* Bermuda:

Bermuda Biological Station for Research, October 1997.

195. Schmidt, N., M. E. Luther, M. Vincent. B. Galperin, and D. Burwell, *An Integrated End-to-End Marine Contaminant Management System for Tampa Bay*. Presented at the Estuarine Research Federation 1997 Meeting, October 14, 1997, Providence, RI.

196. Galperin, B., *Numerical Modeling of Storm Surge, Flooding and Drying, Caused by Hurricane Andrew on the Coast of Louisiana.* Massachusetts: USGS, Woods Hole, September 1997.

197. Galperin, B., *Modeling Hurricane Andrew's Impact on the Louisiana Coastal Area.* Mahwah, New Jersey: HydroQual, Inc., July 1997.

198. Galperin, B., *Large Eddy Simulation (LES) in Geophysical Flows: Recent Developments.* Narragansett Bay Campus, Rhode Island: Graduate School of Oceanography, University of Rhode Island.

199. Galperin, B., *Large Eddy Simulation (LES) in Geophysical Flows: Recent Developments.* Haifa, Israel: Technion - Israel Institute of Technology, November 1996.

200. Galperin, B., *PORTS: Physical Oceanographic Real Time System for Tampa Bay, Florida.* Haifa, Israel: Technion - Israel Institute of Technology, November 1996.

201. Galperin, B., *Modeling Florida estuaries, such as Tampa Bay and Florida Bay, and integration of monitoring and prediction systems.* Princeton, New Jersey: Princeton Ocean Model (POM) Users Group Meeting, Program in Atmospheric and Oceanic Sciences, Princeton University, 1996.

202. Galperin, B., *The Effect of Small-Scale Forcing on Large-Scale Structures in Two-Dimensional Flows.* Tallahassee, Florida: Department of Oceanography, Florida State University.

203. Galperin, B., Blumberg, A., Luther, M., Haines, M., *The Design of a Modeling Strategy for Florida Bay. Final Report for USDOI, National Park Service.* Department Of Marine Science, University Of South Florida, St. Petersburg, Florida: USDOI, National Park Service, January 1996.

204. Galperin, B., *Large Eddy Simulation of 2D Turbulence and the Concept of Stabilized Negative Viscosity.* Irvine, California: the 47th Annual Meeting of the Division of Fluid Dynamics, American Physical Society, November 1995.

205. Galperin, B., *Hydrodynamic Modeling of Florida Bay.* University Of Florida, Gainesville, Florida: Florida Bay Science Conference: A Report by Principal Investigators, October 1995.

206. Galperin, B., *Modeling of Geophysical Turbulence, invited presentation at the Symposium honoring the award of the G.I. Taylor Medal from the Society of Engineering Science to Steven A. Orszag.* New Orleans, Louisiana: the 32nd Annual Technical Meeting of the Society of Engineering Science, October 1995.

207. Galperin, B., *Large Eddy Simulation of 2D Turbulence and the Concept of Stabilized Negative Viscosity.* Los Alamos National Laboratory, New Mexico: Scaling Dynamics and Fluid Turbulence Workshop, Center for Nonlinear Studies, August 1995.

208. Galperin, B., *The Concept of the Stabilized Negative Viscosity and the Efect of Small-Scale Forcing on Large-Scale Oceanic and Atmospheric Circulation.* Center for Nonlinear Studies, J.R. Oppenheimer Study Center, Los Alamos National Laboratory, New Mexico: the 15th Annual International Conference “Nonlinear Phenomena in Ocean Dynamics,” May 1995.

209. Galperin, B., *The Effect of Small Scale Forcing on Large Scale Circulation and The Concept of the Stabilized Negative Viscosity.* Greenbelt, Maryland: NASA Goddard Space Flight Center, 1995.

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211. Galperin, B., Haines, M., Luther, M., *The Design of a Modeling Strategy for Florida Bay. Report for USDOI, National Park Service.* Department Of Marine Science, University Of South Florida, St. Petersburg, Florida: USDOI, National Park Service, January 1995.

212. Galperin, B., Haines, M., Luther, M., *The Design of a Modeling Strategy for Florida Bay - Addendum.* Department Of Marine Science, University Of South Florida, St. Petersburg, Florida: USDOI, National Park Service, January 1995.

213. Sukoriansky, S., Galperin, B., *Eddy Transport of a Passive Scalar in Beta-Plane Turbulent Flow.* Ben-Gurion University, Beer-Sheva, Israel: the 25th Israel Conference on Mechanical Engineering.

214. Galperin, B., *Subgridscale Parameterization of Turbulence and Waves on the Beta-Plane.* Albuquerque, New Mexico: the 46th Annual Meeting of the Division of Fluid Dynamics, American Physical Society, November 1993.

215. Galperin, B., *Eddy Viscosity, Frequency and Diffusivity and Mean Flow Generation in Beta-Plane Turbulence.* Tempe, Arizona: Department of Mechanical and Aerospace Engineering, Arizona State University, September 1993.

216. Galperin, B., Sukoriansky, S., Staroselsky, I., *The Renormalization Group Theory of Turbulence and Waves on the Beta-Plane, the Thirteenth Symposium on Turbulence.* Missouri-Rolla: University of Missouri-Rolla, September 1993.

217. Galperin, B., *Tampa Bay Water Quality Review and Synthesis.* St. Petersburg, Florida: Tampa Bay National Estuary Program Technical Advisory Committee, July 1993.
218. Galperin, B., *A Case Study of Non-Eddy-Resolving Modeling: Beta-Plane Turbulence.* Tallahassee, Florida: Department of Oceanography, Florida State University, 1993.
219. Sukoriansky, S., Galperin, B., Staroselsky, I., *Large-Scale Dynamics of Two-Dimensional Turbulence with Rossby Waves.* Jerusalem, Israel: the 7th Beer-Sheva International Seminar on MHD - Flows and Turbulence, 1993.
220. Galperin, B., *Renormalization Group Theory of Turbulence and Waves on the Beta-Plane.* Princeton, NJ: GFDL/NOAA, Princeton University, 1993.
221. Galperin, B., *Renormalization Group Theory of Turbulence and Waves on the Beta-Plane.* Department Of Oceanography, At Manoa: the Seventh "Aha Huliko'a Hawaiian Winter Workshop, University of Hawaii, January 1993.
222. Galperin, B., *Renormalization Group Theory of Turbulence and Waves on the Beta-Plane.* St. Petersburg, Florida: Department of Marine Science, University of South Florida, December 1992.
223. Galperin, B., Sukoriansky, S., Staroselsky, I., *RNG Analysis of Two-Dimensional Turbulence and Energy Transfers on the Beta-Plane.* Tallahassee, Florida: the 45th annual meeting of the Division of Fluid Dynamics of the American Physical Society, November 1992.
224. Galperin, B., Sukoriansky, S., *RNG Results for Beta-Plane Turbulence, ``Prospects of Turbulence Research, 1992''.* Boulder, Colorado: National Center for Atmospheric Research, August 1992.
225. Galperin, B., *3-D Circulation Model Development for Tampa Bay.* St. Petersburg, Florida: Tampa Bay National Estuary Program Technical Advisory Committee, 1992.
226. Galperin, B., Sukoriansky, S., Staroselsky, I., *Renormalization Group Analysis of Barotropic, Two-Dimensional Turbulence on the Beta-Plane.* New Orleans, Louisiana: AGU Ocean Sciences Meeting, January 1992.
227. Galperin, B., Blumberg, A., Weisberg, R., *A Time-Dependent, Three-Dimensional Model of Circulation in Tampa Bay.* Tampa, Florida: the 2nd International Conference on Estuarine and Coastal Modeling, November 1991.
228. Galperin, B., Sukoriansky, S., Staroselsky, I. (1991). *Renormalization Group Analysis of Two-Dimensional Turbulence on the Beta-Plane.* Scottsdale, Arizona: the 44th annual meeting of the Division of Fluid Dynamics of the American Physical Society, November 1991.
229. Galperin, B., *Hydrodynamic Modeling of the Apalachicola Estuary, Symposium for Interdisciplinary Research in the Apalachicola Estuary.* Havana, Florida: Northwest Florida Water Management District.
230. Galperin, B., Blumberg, A., Weisberg, R., *A Time-Dependent, Three-Dimensional Model of Circulation in Tampa Bay.* Tampa, Florida: BASIS 2.
231. Galperin, B., Weisberg, R., *Recent Findings on the Circulation of Tampa Bay: Initial Results from Data Analysis and Numerical Modeling.* St. Petersburg, Florida: Department of Marine Science, University of South Florida.
232. Galperin, B., Blumberg, A., Darling, R., Saff, E., *Storm Surge Modeling for the Turkey Point Power Plant. Report for Florida Power & Light Company.* Tampa, Florida: Institute for Constructive Mathematics, Department of Mathematics, University of South Florida, 1990.
233. Galperin, B., *Developments in Modeling of Geophysical Turbulence.* Haifa, Israel: Technion-Israel Institute of Technology, 1990.
234. Galperin, B., *Numerical Simulation of the Storm Surge. Report for Florida Power & Light Company.* Tampa, Florida: Institute for Constructive Mathematics, Department of Mathematics, University of South Florida, 1990.
235. Galperin, B., Roy, S., Yakhot, A., *Application of Yakhot-Orszag Theory of Turbulence to Rotating Flows.* Nasa Ames Research Center, Palo Alto, California: 42nd Annual Meeting of the Division of Fluid Dynamics, American Physical Society, November 1989.

16. SERVICE

REVIEWER

Agence Nationale de la Recherche, France
Annales Geophysicae (ANGEO)
ASCE Journal of Hydraulic Engineering
Asia-Pacific Journal of Atmospheric Sciences
ASME Journal of Fluid Engineering
Atmosphere

Boundary-Layer Meteorology
Cambridge University Press
Computers & Fluids
Deep Sea Research I
Dutch Foundation for Fundamental Research on Matter, FOM
Dynamics of Atmospheres and Oceans
Estuarine, Coastal and Shelf Science
Experimental Thermal and Fluid Science
Geophysical and Astrophysical Fluid Dynamics
Geophysical Research Letters
Icarus
Journal of Atmospheric and Oceanic Technology
Journal of Fluid Mechanics
Journal of Geophysical Research – Atmosphere, Ocean, Planets
Journal of Marine Systems
Journal of Physical Oceanography
Journal of the Atmospheric Sciences
Journal of Turbulence
Kuwait Foundation for the Advancement of Sciences
Meteorologische Zeitschrift
Monthly Weather Review
NASA
Nature
Nature Physics
National Research Council
Natural Sciences and Engineering Research Council of Canada
National Science Foundation
Natural Environment Research Council, UK
Ocean Dynamics
Ocean Modelling
Optics & Laser Technology
Physica A
Physica D
Physical Review E
Physical Review Fluids
Physical Review Letters
Physics of Fluids
Physics Reports
Planetary and Space Science
Prentice Hall
Science Foundation of Ireland
Theoretical and Computational Fluid Dynamics
The Israel Science Foundation
US Army Research Office
U.S. - Israel Binational Science Foundation

UNIVERSITY AND COLLEGE COMMITTEES

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CMS Library Committee
Space Committee
IMSE Committee
IT Committee
Tenure and Promotion Committee
Faculty Annual Evaluation Committee
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Faculty Senate
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CONFERENCES, SESSIONS, LECTURES

2011 – present	Organizing and running a section on the Geophysical Fluid Dynamics at the conference "Turbulent Mixing and Beyond" held at the Abdus Salam International Theoretical Physics Institute in Trieste, Italy
2011 - 2013	Organizing and running the program "Zonal jets and eddies – planetary science and satellite oceanography at the crossroads" at the International Space Science Institute in Bern, Switzerland. This program will result in a book "Zonal Jets" published by the Cambridge University Press and co-edited by Professor Peter Read of the University of Oxford and myself
2010	Co-chairing a session on zonal jets at the AGU Ocean Sciences meeting in Portland, Oregon
2008	Giving a tutorial on the Quasi-Normal Scale Elimination Theory of Turbulence at the Penn State University
2008	Organizing a workshop on experimental investigation of zonal jets at CMS – USF, St. Petersburg, Florida
2006	Organizing and chairing a session on zonal jets at the AGU Ocean Sciences meeting in Honolulu, Hawaii
2000 – 2007	Chairing Atmospheric Turbulence sessions at the Annual Assemblies of the European Geophysical Society in Nice and Vienna
2001 – 2005	Editorial work for the CARTUM book, "Marine Turbulence", published by the Cambridge University Press
1999 – 2001	Member of the Scientific and Steering Committees of CARTUM – the EU-sponsored concerted action for Comparative Analysis and Rationalization of Second-Moment Turbulence Models
1990	Organizing, running and chairing the conference "Large Eddy Simulation – Where Do We Stand?" at St. Petersburg Beach, Florida. The conference resulted in a book co-edited by Professor Steven Orszag of Princeton University and myself, published by the Cambridge University Press
1989 - present	Inviting and hosting speakers for CMS seminars and the Eminent Scholar Lecture Series