

CAPACITATI

1. F. Spineanu, M. Vlad, „Field theoretical formulation of the asymptotic states of relaxed ideal fluids”, **Journal of Physics A, Mathematical and Theoretical**, submitted (2014)
2. F. Spineanu, *The ideal versus the reality: topology and turbulence in current density in tokamak*, Topological Dynamics in the Physical and Biological Sciences, **Proceedings Tangled Magnetic Fields in Astro- and Plasma Physics**, Cambridge University Press, in print (2014)
3. F. Spineanu, M. Vlad, „A field theoretical prediction of a property of the tropical cyclone”, Discussion forum at the **Nonlinear Processes in Geophysics**, <http://arxiv.org/pdf/1310.2750.pdf> (2014)
4. M. Vlad, „Ion stochastic trapping and drift turbulence evolution”, **Physical Review E** **87** 053105 (2013).
5. F. Spineanu, M. Vlad, D. Palade, *Self-organization at criticality of the atmospheric convection, in Convection parameterization, *** Edited by R.S. Plant and J.-I. Yano, World Scientific, Vol2, in print* (2014)
6. J.-I. Yano, M. Vlad, S. H. Derbyshire, J.-F. Geleyn, K. Kober, „Generalization, consistency, and unification in the parameterization problem”, **Bulletin of the American Meteorological Society** **95**, Issue 4 (2014) 619-622.
7. M. Vlad, F. Spineanu, „Diffusion and stochastic island generation in the magnetic field line random walk”, **Astrophysical Journal** **791** (2014) 56.
8. F. Spineanu, M. Vlad, „Statistical analysis of the linking number in stochastic magnetic fields”, **Romanian Reports in Physics**, accepted 2014.
9. M. Vlad, F. Spineanu, A. M. Croitoru, *Nonlinear effects in perpendicular particle transport in stochastic magnetic fields*, in preparation.
10. F. Spineanu, *The ideal versus the reality: topology and turbulence in current density in tokamak*, Workshop on Tangled Magnetic Fields in Astro and Plasma Physics, Edimburgh, 15-20 October 2012, **keynote lecture**.
11. F. Spineanu, M. Vlad, *Comparative studies of the statistical and field theoretical descriptions of vorticity self-organization in two-dimensional fluids*, International Conference on Statistical Physics SigmaPhi-2014, Rhodos, Greece, July 7-12, 2014, **invited lecture**.
12. M. Vlad, *What theoretical physics can do*, Workshop „Convection Parameterization: Generalization, Consistency, Unification”, 19-21 March 2013, Palma, Spain, **invited lecture**.
13. M. Vlad, F. Spineanu, „Statistics of eddy transport”, Workshop Nonequilibrium statistical mechanics and the theory of extreme events in Earth science, Cambridge, Isac Newton Institute, 29/10/-1/11/2013, **invited lecture**, <http://www.newton.ac.uk/programmes/MFE/seminars/2013103117351.html>

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14. F. Spineanu, M. Vlad, *The equality of the radial extension with the Rossby radius for the tropical cyclons*, 19th Conference of Atmospheric and Oceanic Fluid Dynamics, 17–21 June 2013, Newport, Rhode Island, USA.
15. F. Spineanu, M. Vlad, V. Baran, „*Ring - type vorticity distribution arising as stationary coherent flows in a field theoretical description of the plasma in strong magnetic field*”, **From Black Holes to Cosmic Rays when plasmas go wild; a tribute to Guy Pelletier**, 14-18 October 2013, Les Houches, France, http://ipag.osug.fr/plasmas2013/talks/Spineanu_Houches.pdf
16. M. Vlad, F. Spineanu, M. A. Croitoru, „*Charged particle transport in 3-dimensional stochastic magnetic fields*”, **From Black Holes to Cosmic Rays when plasmas go wild; a tribute to Guy Pelletier**, 14-18 October 2013, Les Houches, France, http://ipag.osug.fr/plasmas2013/talks/Vlad_Houches.pdf
17. F. Spineanu, M. Vlad, „*The self-organization at criticality of the convection-precipitation dynamics and the possibility of extreme events*”, Workshop Nonequilibrium statistical mechanics and the theory of extreme events in Earth science, Cambridge, Isaac Newton Institute (INI), 29/10/-1/11/2013, <http://www.newton.ac.uk/programmes/MFE/Spineanu.pdf>
18. F. Spineanu, *The principle of minimum rate of entropy production; an example*, Workshop „Thermodynamics and scale separation”, 14-15 January 2013, Reading, UK
19. M.Vlad, F. Spineanu, *Trajectory statistics and turbulence evolution*, International Conference on Statistical Physics SigmaPhi-2014, Rhodos, Greece, July 7-12, 2014.
20. F. Spineanu, M. Vlad, *Still believe in low-order models?*, Workshop Parameterization and Downscaling, Milano, January 29-30, 2014.
21. F. Spineanu, M. Vlad, V. Baran, *Field Theoretical Modelling of Ring Vortices in 2D Flow*, 4th Ph.D Summer School-Conference on Mathematical Modeling of Complex Systems, Grecia, Atena, 14-25 Iulie, 2014.
22. F. Spineanu, M. Vlad, A. Zubarev, , 4th Ph.D Summer School-Conference on Mathematical Modeling of Complex Systems, Grecia, Atena, 14-25 Iulie, 2014.
23. M. Vlad, F. Spineanu, A. M. Croitoru, *Nonlinear regimes in field line random walk in space plasmas*, 4th Ph.D Summer School-Conference on Mathematical Modeling of Complex Systems, Grecia, Atena, 14-25 Iulie, 2014.
24. M. Vlad, „*Trajectory trapping and the evolution of drift turbulence beyond the quasilinear stage*”, electronic paper arXiv: 1209.2083, <http://arxiv.org/pdf/1209.2083.pdf> (2012)
25. F. Spineanu, M. Vlad, „*A field theoretical prediction of a property of the tropical cyclone*”, electronic paper arXiv: 1310.2750, <http://arxiv.org/pdf/1310.2750.pdf> (2013)
26. F. Spineanu, M. Vlad, D. Palade, „*Regimes of self-organized criticality in the atmospheric convection*”, <http://arxiv.org/pdf/1404.4538.pdf> (2014)
27. F. Spineanu, M. Vlad, „*Field theoretical formulation of the asymptotic relaxation states of ideal fluids*”, <http://arxiv.org/pdf/1312.6613.pdf> (2014)