Publications


5. P. Constantin, Blow up for a nonlocal evolution equation, MSRI report 038-84-6, July 1984.


11. P. Constantin, C. Foias, B. Nicolaenko and R. Temam, Nouveaux
resultats sur les varietes inertielles pour des equations differentielles
dissipatives, , C. R. Acad. Sc. Paris, 302 (Mars 1986), Serie I, 375 -
378.

12. P. Constantin, Collective estimates for families of functions with or-

13. P. Constantin, J-C. Saut, Effets regularisants locaux pour des equa-
tions dispersives generales, C. R. Acad. Sc. Paris 304 (1987), Serie I,
407 - 410.

14. P. Constantin, C. Foias and R. Temam, On the dimension of the
attractors in two dimensional turbulence, Physica D 30 (1988), 294 -
296.

15. V. Barcilon P. Constantin and E. Titi, Existence of solutions to the

16. P. Constantin, C. Foias, Navier-Stokes Equations, The University

17. P. Constantin, J-C. Saut, Local smoothing properties of dispersive

18. P. Constantin, A. Majda, The Beltrami spectrum for incompressible

19. P. Constantin, E. Titi, On the evolution of nearly circular vortex

20. P. Constantin, J. D. Gibbon and C. Foias, Finite dimensional attractor

21. P. Constantin, C. Foias, B. Nicolaenko and R. Temam, Spectral barri-
ers and inertial manifolds for dissipative partial differential equations,


36. P. Constantin and M. Pugh, Global solutions for small data to the Hele-Shaw problem, Nonlinearity, 6 (1993), 393 - 415.


60. P. Constantin, A few results and open problems regarding incompressible fluids, Notices of the AMS, 42 (1995), 658-663.

61. P. Constantin and J. Wu, Vanishing viscosity limit for vortex patches, (Mittag-Leffler preprint ISSN 1103-467X, No 26 1994/95)

62. P. Constantin, C. Fefferman and A. Majda, Sufficient conditions for regularity for the 3D incompressible Euler equations, Mittag Leffler ISSN 1103-467X, No 29 1994/95.

63. P. Constantin, C. Fefferman and A. Majda, Geometric constraints on potentially singular solutions for the 3-D Euler equations, Commun. in PDE 21 (1996), 559-571.


67. P. Constantin, Ch. Doering and E. Titi, Rigorous estimates of small scales in turbulent flows, Journal of Mathematical Physics 37 (1996) 6152-6156.


82. P. Constantin, Q. Nie, N. Schorghofer, Front formation in an active scalarequation, Physical Review E60 (1999), 2858-2863.


95. P. Constantin, Filtered Viscous Fluid Equations, Computer and Mathematics with Applications, **46** (2003), 537-546.


100. P. Constantin, Transport in rotating fluids, Discrete and Continuous Dynamical Systems, **10** (2004), no. 1-2, 165-176.

101. P. Constantin, I. Kevrekidis, E.S. Titi, Remarks on a Smoluchowski equation, Discrete and Continuous Dynamical Systems, **11** (1) (2004), 101-112.

102. P. Constantin, I. Kevrekidis, E. S. Titi, Asymptotic states of a Smoluchowski equations, Archive Rational Mech. Analysis, **174** (2004), 365-384.

103. P. Constantin, J. Vukadinovic, Note on the number of steady states for a 2D Smoluchowski equation, Nonlinearity **18** (2005), 441-443.
104. P. Constantin, E.S. Titi, J. Vukadinovic, Dissipativity and Gevrey regularity of a Smoluchowski equation, Indiana Unive. Math. J, 54 (2005), 949-969.

105. P. Constantin, Euler equations, Navier-Stokes equations and turbulence, in Mathematical foundation of turbulent viscous flows: Lectures given at the C.I.M.E. Summer School, Martina Franca, Italy. Editors: M. Cannone and T. Miyakawa, Springer Lecture Notes in Mathematics 1871 (2005), 1-43.


108. P. Constantin, B. Levant, E.S. Titi, Analytic study of shell models of turbulence, Physica D, 219 (2006) 120-141.


117. P. Constantin, B. Levant, E. Titi, Regularity of inviscid shell models of turbulence, Physical Review E 75 1 (2007) 016305.


120. P. Constantin, B. Levant, E. Titi, Regularity of inviscid shell models of turbulence, Phys. Rev E 75 (2007), no 1, 016304, 10pp.


123. P. Constantin, Euler and Navier-Stokes equations, Publ. Mat. 52 (2008), no 2., 235-265.


135. P. Constantin, PDE problems from simple to complex fluids, *Nonlinearity*, **21** (2008), no 11, T239-244.


139. P. Constantin, G. Seregin, Hölder continuity of solutions of 2D Navier-Stokes equations with singular forcing, Nonliner PDE and Related Topics, A. Arkhipova and A. Nazarov, eds, AMS (2010), 87-97.

140. P. Constantin, G. Seregin, Global regularity of solutions of coupled Navier-Stokes equations and nonlinear Fokker-Planck equations, DCDS-A 26 No. 4 (April 2010) 1185-1186.


143. P. Constantin, W. Sun, Remarks on Oldroyd-B and related complex fluid models, CMS, 10 No. 1, (2012), 33-73.


146. P. Constantin, V. Vicol, Nonlinear maximum principles for dissipative linear nonlocal operators and applications, GAFA 22 No. 5, (2012), 1289-1321.

147. P. Constantin, M. Kliegl, Note on global regularity for 2D Oldroyd-B fluids with diffusive stress, ARMA, 206 No.3, (2012), 725-740.


165. P. Constantin, M. Coti Zelati, V. Vicol, Uniformly attracting limit sets for the critically dissipative SQG equation, Nonlinearity 29 (2016), 298-318.


178. P. Constantin, J. La, V. Vicol, Remarks on a paper by Gavrilov: Grad-Shafranov equations, steady solutions of the three dimensional incompressible Euler equations with compactly supported velocities, and applications, GAFA 29 (6) 1173-1793 (2019).


