



付遵涛

副教授

电话: 010-62767184 (办公室)

Email: fuzt@pku.edu.cn

物理大楼北楼557

北京大学物理学院大气科学系; 100871

- 教育背景
  - 09/1995—12/1999 北京大学地球物理学系气象学专业，理学博士
  - 09/1990—07/1995 北京大学地球物理学系固体地球物理专业，理学学士

- 研究兴趣
  - 低频波动力学；
  - 中尺度动力学（运动结构、流形等的动力学研究）；
  - 非线性动力学（非线性波研究；天气、气候等多尺度时空序列的非线性分析等）。

- 研究工作经历
  - 2002年至今 北京大学物理学院大气科学系教学科研
  - 2000年1月—2001年11月北京大学力学系湍流研究国家重点实验室与长江学者特聘教授余振苏教授合作做博士后研究。
  - 1998年6月参加位于意大利得里雅斯特的 ICTP 举办的国际会议和研讨班；

- 奖励
  - 1997—1998年度“创新”奖学金.
  - 2002年度北京大学优秀博士论文三等奖
  - 2003年度涂长望青年气象科技一等奖
  - 2004年度北京大学优秀班主任二等奖

- 在研项目
  - “气候过程时空场对称性和预测研究（40305006）”
  - “干旱一半干旱区气候过程的平稳与非平稳分析（KJS0404）”，江苏省气象灾害与环境

- “我国干旱和半干旱陆面过程对降水及沙漠化的影响（2002DIB20070）”，科技部科研院所社会公益专项基金
- 指导学生
  - 本科生:
    - 汪景烨（男）2003年本科论文（99级）：大气边界层湍流时间序列的非线性分析，中国电波传播研究所青岛分所工作
    - 张霖（男）2004年本科论文（00级）：大气边界层温度时间序列的关联维分析，美国Harvard University攻读博士学位
    - 韩凯（男）2004年本科论文（00级）：中国干旱半干旱地区相对湿度的DFA分析，海航集团工作
    - 游春华（男）2004年本科论文（00级）：符号计算法求解非线性发展方程，北京大学环境学院攻读硕士学位
  - 研究生:
    - 陈哲（女）2005年硕士论文（02级2002/09~2005/07）：
    - 姚振华（男）2007年硕士论文（04级2004/09~2007/07）：
    - 林光星（男）2007年硕士论文（04级2004/09~2007/07）：
- 兼职
  - 2000/01~2003/12 中国科学院大气物理研究所大气边界层物理和大气化学国家重点实验室(LAPC)客座
  - 2002~今 北京大学湍流与复杂系统研究国家重点实验室客座
  - 2002/4~2004/7 北京大学物理学院大气科学00级班主任，本班于2002年获得北京大学2001~2002年度先进学风班
  - “Phys. Lett. A”、“Chaos, Solitons & Fractals”、“Commun. Theor. Phys.”、“大气科学”、“物理学报”、“高校应用数学学报”等刊物审稿
  - 校“挑战杯”论文评审
  - 2004/9~2008/7 北京大学物理学院04级年级指导教师
- 著作列表
  - 期刊文章:
    1. 杜绪惠, 付遵涛, 赵鸿儒, 王宝琴. 1996 "关于磁异常的模拟试验研究". 地震地磁观测与研究, 17(3), 76–81.
    2. ZHAO Qiang, FU Zuntao, CHEN Jiong and LIU Shikuo. 1997 "CISK Evaporation-Wind Feedback Mechanism and 30–60 Days Oscillations in the Tropical Atmosphere". Acta Meteor. Sinica. 11, 164–175.
    3. WANG Jiayong, CHEN Jiong, FU Zuntao and LIU Shikuo. 1997 "CISK-Rossby

Waves, CISK-Kelvin Waves and Low-frequency Oscillations". Chinese J. Atmos. Sci. 21(1), 48–60.

4. FU Zuntao, LIU Shikuo and Fu Caixia. 1998 "Low-frequency waves forced by large-scale topography in the barotropic model". Adv. Atmos. Sci. 15(3), 312–320.
5. 付遵涛, 刘式适, 付彩霞. 1998 "斜压模式中的非绝热波". 北京大学学报(自然科学版), 34(5), 646–655.
6. 付遵涛, 刘式适, 王树涛. 1998 "正压模式中大地形作用下的低频波". 高原气象, 17(3), 223–230.
7. 付遵涛, 刘式适. 1999 "正压准地转模式中大地形作用下的低频波". 应用气象学报, 10(1), 20–27.
8. 付遵涛, 刘式适. 1999 "辐射冷却与低频振荡中的宽频带(broadband)现象". 热带气象学报, (15)4, 330–339.
9. 刘式适, 刘式达, 付遵涛, 赵强. 1999 "地球自转与气候动力学----振荡理论". 地球物理学报, 42(5), 590–598.
10. 刘式适, 刘式达, 付遵涛. 2000 "地球自转与El Nino----波动理论". 地球物理学报, 43(2), 152–159.
11. LIU Shikuo, FU Zuntao, LIU Shida, ZHAO Qiang. 2000 "Multi-order exact solutions of the complex Ginzburg-Landau equation". Phys. Lett. A. 269 (5–6), 319–324.
12. FU Zuntao, ZHAO Qiang, QIAO Fangli, LIU Shikuo. 2000 "Response of atmospheric low-frequency waves to oceanic forcing in the tropics". Adv. Atmos. Sci. 17(4), 569–575.
13. Liu Shikuo, Fu Zuntao, Liu Shida and Zhao Qiang, 2001 "A simple fast method in finding particular solutions of some nonlinear PDE". Applied Mathematics and Mechanics, 22, 326–331.
14. LIU Shida, LIU Shikuo, FU Zuntao, ZHAO Qiang. 2001 "Spiral solutions of the two-dimensional complex Ginzburg-Landau equation". Commun. Theor. Phys. 35(2), 159–161.
15. ZHAO Qiang, FU Zuntao, LIU Shikuo. 2001 "Equatorial envelope Rossby solitons in a shear flow". Adv. Atmos. Sci. 18, 418–428.
16. LIU Shikuo, FU Zuntao, LIU Shida, ZHAO Qiang. 2001 "Jacobi elliptic function expansion method and periodic wave solutions of nonlinear wave equations". Phys. Lett. A . 289, 69–74.
17. FU Zuntao, LIU Shikuo, LIU Shida, ZHAO Qiang. 2001 "New Jacobi elliptic

- function expansion and new periodic solutions of nonlinear wave equations". Phys. Lett. A. 290, 72–76.
18. 刘式适, 付遵涛, 刘式达, 赵强. 2001 “Jacobi椭圆函数展开法及其在求解非线性波动方程中的应用”. 物理学报, 50(11), 2068–2073.
19. LIU Shida, LIU Shikuo, FU Zuntao, ZHAO Qiang. 2002 “The Hopf bifurcation and spiral wave solution of the complex Ginzburg–Landau equation”. Chaos, Solitons & Fractals, 13, 1377–1381.
20. 刘式适, 付遵涛, 刘式达, 赵强. 2002 “一类非线性波动方程中的新周期解”. 物理学报, 51(1), 10–14.
21. 刘式达, 刘式适, 梁爽, 任奎, 付遵涛. 2002 “非线性动力学研究的几个问题”. 自然科学进展, 12(1), 1–7.
22. 刘式达, 付遵涛, 刘式适, 赵强. 2002 “非线性方程的Jacobi椭圆函数包络周期解”. 物理学报, 51(4), 718–722.
23. FU Zuntao, LIU Shikuo, LIU Shida. 2002 “New transformations and new approach to find exact solutions to nonlinear equations”. Phys. Lett. A. 299(5/6), 507–512.
24. 刘式适, 付遵涛, 刘式达, 赵强. 2002 “变系数非线性方程的Jacobi椭圆函数展开解”. 物理学报, 51(9), 1923–1926
25. SHE Zhensu, FU Zuntao, CHEN Jiong, LIANG Shuang, LIU Shida. 2002 “Hierarchical structure in climate and atmospheric turbulence”, Progress in Natural Science, 12(10), 747–752.
26. 付遵涛, 李昕, 刘式达, 余振苏. 2002 “大气边界层湍流速度场的层次结构分析”. 地球物理学报, 45 (增刊), 30–36
27. LIU Shida, FU Zuntao, LIU Shikuo, REN Kui. 2002 “The homoclinic orbit solution for functional equation”, Communications in Theoretical Physics, 38(5), 553–554.
28. FU Zuntao, LIU Shikuo, LIU Shida, ZHAO Qiang. 2003 “The JEFE method and periodic solutions of two kinds of nonlinear wave equations”, Communications in Nonlinear Science and Numerical Simulation, 8(2), 67–75
29. FU Zuntao, LIU Shikuo, LIU Shida. 2003 “A new approach to solve nonlinear wave equations”, Communications in Theoretical Physics, 39 (1), 27–30
30. LIU Shida, LIU Shikuo, FU Zuntao, REN Kui, GUO Yan. 2003 “The most intensive fluctuation in chaotic time series and relativity principle”,

31. LIU Shida, FU Zuntao, LIU Shikuo, ZHAO Qiang, 2003 “Envelope periodic solutions to coupled nonlinear equations”, Communications in Theoretical Physics, 39(2), 167–172
32. LIU Shikuo, FU Zuntao, LIU Shida, REN Kui. 2003 “Scaling equation for invariant measure”, Communications in Theoretical Physics, 39(3), 295–296.
33. LIU Shikuo, FU Zuntao, LIU Shida, ZHAO Qiang. 2003 “Power series expansion method and its applications to nonlinear wave equation”. Phys. Lett. A, 309(3/4), 234–239.
34. FU Zuntao, LIU Shida, LIU Shikuo. 2003 “Solving nonlinear wave equations by elliptic equation”. Communications in Theoretical Physics, 39(5), 531–536.
35. 付遵涛, 刘式达, 陈炯, 刘式适, 梁爽. 2003 “周期2, 3, 5及其气候突变点预测”. 地学前缘, 10(2), 415–418.
36. LIU Shida, FU Zuntao, LIU Shikuo, XIN Guojun, LIANG Fuming, FENG Beiye. 2003 “Solitary wave in linear ODE with variable coefficients”. Communications in Theoretical Physics, 39(6), 643 – 646.
37. FU Zuntao, LIU Shikuo, LIU Shida, ZHAO Qiang. 2003 “Lame function and its application to some nonlinear evolution equations”. Communications in Theoretical Physics, 40(1), 53 – 56.
38. 刘式达, 刘式适, 付遵涛, 辛国君, 梁福明. 2003 “从二维地转风到三维涡旋运动”. 地球物理学报, 46(3), 450–454.
39. 刘式适, 付遵涛, 王彰贵, 刘式达. 2003 “Lame函数和非线性演化方程的扰动方法”. 物理学报, 52(8), 1837–1841.
40. 刘式适, 陈华, 付遵涛, 刘式达. 2003 “Lame函数和非线性演化方程的多级准确解的不变性”. 物理学报, 52(8), 1842–1847.
41. FU Zuntao, LIU Shikuo, LIU Shida. 2003 “Applications of elliptic equation to nonlinear coupled systems”. Communications in Theoretical Physics, 40 (3), 285 – 292.
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43. 付遵涛, 刘式适. 2003 “基本气流的垂直切变作用下的低纬低频波”. 大气科学, 27(6), 983–991.
44. FU Zuntao, LIU Shikuo, LIU Shida. 2003 “Lame function and perturbed

- solutions to NLS equation and coupled NLS equations". Chinese Journal of Physics, 41(5), 456–464.
45. FU Zuntao, DENG Liantang, LIU Shikuo, LIU Shida. 2003 "Solutions to generalized mKdV equation". Communications in Theoretical Physics, 40 (6), 641–644,
46. 付遵涛, 刘式适, 刘式达. 2003 “一类非线性演化方程的新多级准确解”. 物理学报, 52(12), 2949–2953.
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49. FU Zuntao, CHEN Zhe, LIU Shikuo, LIU Shida. 2004 "New solutions to generalized mKdV equation". Communications in Theoretical Physics, 41 (1), 25–28.
50. FU Zuntao, LIU Shida, LIU Shikuo. 2004 "New exact solutions to NLS equation and coupled NLS equations". Communications in Theoretical Physics, 42(2), 189–194.
51. FU Zuntao, LIU Shikuo, LIU Shida, ZHAO Qiang. 2004 "New exact solutions to KdV equations with variable coefficients or forcing", Applied Mathematics and Mechanics, 25(1), 73–79.
52. 付遵涛, 刘式适, 刘式达. 2004 “非线性波方程求解的新方法”. 物理学报, 53 (2), 343–348.
53. LIU Shida, FU Zuntao, LIU Shikuo, XIN Guojun, LIANG Fuming. 2004 "Solitary wave and wavelet". Communications in Theoretical Physics, 41 (3), 335–338,
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- transformation and new solutions to mKdV equation”, Phys. Lett. A, 325 (5/6), 364–370,
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59. ZHAO Qiang, LIU Shikuo, FU Zuntao. 2004 “Exact periodic-wave solutions of the Nizhnik–Novikov–Veselov equation”. Communications in Theoretical Physics, 41(5), 719–722,
60. LIU Shida, FU Zuntao, LIU Shikuo, WANG Zhanggui. 2004 “Stationary periodic solutions and asymptotic series solutions to nonlinear evolution equations”. Chinese Journal of Physics, 42(2), 127–134, .
61. FU Zuntao, LIU Shida, LIU Shikuo. 2004 “New solutions to mKdV equation”. Phys. Lett. A, 326(/5–6), 364–374,
62. FU Zuntao, Zhang Lin, LIU Shida, LIU Shikuo. 2004 “Basic pattern in atmospheric turbulence model”, Communications in Theoretical Physics, 41(6), 845–848,
63. FU Zuntao, CHEN Zhe, LIU Shida, LIU Shikuo. 2004 “Periodic structure of equatorial envelope Rossby wave under the influence of diabatic heating”. Communications in Theoretical Physics, 42(1), 43–48,
64. ZHAO Qiang, LIU Shikuo, FU Zuntao. 2004 “Exact periodic-wave solutions for (2+1)-dimensional Boussinesq equation and (3+1)-dimensional KP equation”. Communications in Theoretical Physics, 42(2), 293–241,
65. LIU Shikuo, LIU Shida, FU Zuntao, Xin Guojun, Liang Fuming. 2004 “The structure and bifurcation of atmospheric motions”, Adv. Atmos. Sci. 21 (4), 557–561,
66. FU Zuntao, LIU Shikuo, LIU Shida. 2004 “Elliptic equation and new solutions to nonlinear wave equations”. Communications in Theoretical Physics, 42(3), 343–346,
67. FU Zuntao, LIU Shikuo, LIU Shida. 2005 “New exact solutions to the KdV–Burgers–Kuramoto equation”. Chaos, Solitons & Fractals, 23(2), 609–616,
68. 迟东妍, 刘式适, 付遵涛. 2004 “降水条件下台风的定常运动和螺旋斑图”, 北京大学学报, 40(5), 788–796
69. 梁福明, 时少英, 刘式达, 刘式适, 付遵涛, 辛国君. 2004 “大气流场的拓扑结构”. 地球物理学报, 47(4), 584–589,
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- envelope Rossby wave under a generalized external forcing". Communications in Theoretical Physics, 42(4), 509–512,
71. LIU Shikuo, FU Zuntao, LIU Shida. 2004 "Lamé function and multi-order exact solutions to nonlinear coupled systems". Communications in Theoretical Physics, 42(5), 699–702,
72. LIU Shikuo, FU Zuntao, LIU Shida, LIANG Fuming, XIN Guojun. 2004 "Solitary wave and wave front as viewed from curvature". Communications in Theoretical Physics, 42(6), 814–816,
73. 邓莲堂, 刘式适, 徐祥德, 付遵涛. 2004 "Rossby参数 $\beta$ 在涡旋Rossby波中的作用". 热带气象学报, 20(5), 483–492
74. 刘式适, 付遵涛, 刘式达, 许焕斌, 辛国君, 梁福明. 2004 "龙卷风的漏斗结构理论". 地球物理学报, 47(6), 959~963,
75. FU Zuntao, LIU Shikuo, LIU Shida. 2005 "Multiple structures of two-dimensional nonlinear Rossby wave". Chaos, Solitons & Fractals, 24(1), 383~390,
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79. FU Zuntao, LIU Shikuo, LIU Shida. 2005 "New rational form solutions to mKdV equation". Communications in Theoretical Physics, 43(3), 423~426,
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81. FU Zuntao, LIU Shikuo, LIU Shida. 2004 "Exact solutions to double and triple sinh-Gordon equations". Z. Naturforsch. A, 59(12), 933–937,
- 会议文集文章:
- 刘式适, 刘式达, 付遵涛. 2002 "关于特大自然灾害的某些数学研究方法". 见: 特大自然灾害预测的新途径、新方法——香山科学会议第133次学术讨论会文集 ( 2000 ), 北京: 科学出版社。
  - LIU Shida, CHEN Jiong, FU Zuntao, LIU Shikuo. 2002 "The prediction for

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