Wien, April 6th 2024

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List of publications

1.1 Theses

1. Kupka, F., *Modellatmosphären und synthetische Spektren am Beispiel von α Circini*, master thesis, Institute for Astronomy, Univ. of Vienna (1994) (159 pages, in German)

2. Kupka, F., *Entwicklung eines hybriden Particle-Mesh Ewald Verfahrens*, master thesis, Institute for Experimental Physics, Univ. of Vienna (1996) (122 pages, in German)

3. Kupka, F., *Sparse Grid Spectral Methods for the Numerical Solution of Partial Differential Equations with Periodic Boundary Conditions*, German title: *Spektralmethoden auf dünnen Gittern zur numerischen Lösung partieller Differentialgleichungen mit periodischen Randbedingungen*, PhD thesis, Institute of Mathematics, Univ. of Vienna (1997) (165 pages, mostly in English)

4. Kupka, F., *Konvektion und konvektives Mischen in der stellaren Astrophysik*, English title: *Convection and Convective Mixing in Stellar Astrophysics*, Habilitation thesis, Faculty of Physics, TU Munich (2007) (344 pages, mostly in English)

1.2 Co-editor of conference proceedings and monographs

1.2.1 Appeared

1. Adelman, S.J., Kupka, F., Weiss, W.W., *M.A.S.S. - Model Atmospheres and Spectrum Synthesis*, ASP Conf. Ser. Vol. 108, San Francisco (1996) (about 320 pages)

2. Kupka, F., Hillebrandt, W., *Proceedings of the Workshop on "Interdisciplinary Aspects of Turbulence"*, Proceedings MPA/P15, Garching (2005) (about 188 pages)

3. Kupka, F., Roxburgh, I.W., Chan, K.L., *Proceedings of the IAU Symposium 239 "Convection in Astrophysics"*, Cambridge University Press, Cambridge (2007) (about 540 pages)

4. Hillebrandt, W., Kupka, F., *Interdisciplinary Aspects of Turbulence*, Lecture Notes in Physics Vol. 756, Springer Verlag, Berlin (2009) (about 340 pages, ISBN: 978-3-540-78960-4)

1.3 Publications in refereed journals

1.3.1 Appeared

1. Muthsam, H.J., Göb, W., Kupka, F., Liebich, W., Zöchling, J., *A numerical study of compressible convection*, Astron. Astrophys. 293, 127-141 (1995)

2. Piskunov, N.E., Kupka, F., Ryabchikova, T.A., Weiss, W.W., Jeffery, C.S., *VALD: The Vienna Atomic Line Data Base*, Astron. Astrophys. Suppl. 112, 525-535 (1995)

3. Kupka, F. Ryabchikova, T.A., Weiss, W.W., Kuschnig, R., Rogl, J., Mathys, G., *Abundance Analysis of roAp stars. I. alpha Circini*, Astron. Astrophys. 308, 886-894 (1996)

4. Gelbmann, M., Kupka, F., Weiss, W.W., Mathys, G., *Abundance Analysis of roAp stars.* II. HD 203932, Astron. Astrophys. 319, 630-636 (1997) (and Astron. Astrophys. 322, 1026 (1997)

5. Smalley, B., Kupka, F., *The role of convection on the uvby colours of A, F, and G stars*, Astron. Astrophys. 328, 349-360 (1997)

6. Audard, N., Kupka, F., Morel, P., Provost, J., Weiss, W.W., *The acoustic cut-off frequency of roAp stars*, Astron. Astrophys. 335, 954-958 (1998)

7. Heiter, U., Kupka, F., Paunzen, E., Weiss, W.W., Gelbmann, M., *Abundance analysis of the λ Bootis stars HD 192640, HD 183324 and HD 84123*, Astron. Astrophys. 335, 1009-1017 (1998)

8. Gardiner, R.B., Kupka, F., Smalley, B., *Testing convection theories using Balmer line profiles of A, F and G stars*, Astron. Astrophys. 347, 876-890 (1999)

9. Kupka, F., *Turbulent convection: comparing the moment equations to numerical simulations*, Astrophys. Journal Letters 526, L45-L48 (1999) (`http://dx.doi.org/10.1086/312363`)

10. Kupka, F., Piskunov, N., Ryabchikova, T.A., Stempels H.C., Weiss, W.W., *VALD-2: Progress of the Vienna Atomic Line Data Base*, Astron. Astrophys. Suppl. 138, 119-133 (1999) (free access at `http://dx.doi.org/10.1051/aas:1999267`)

11. Muthsam, H.J., Göb, W., Kupka, F., Liebich, W., *Interacting Convection Zones*, New Astronomy 4, 405-417 (1999)

12. Ryabchikova, T., Piskunov, N., Savanov, I., Kupka, F., Malanushenko, V., Eu III *identification and* Eu *abundance in cool CP stars*, Astron. Astrophys. 343, 229-236 (1999)

13. Ryabchikova, T.A., Piskunov, N.E., Stempels, H.C., Kupka, F., Weiss, W.W., *The Vienna Atomic Line Data Base - a Status Report* in Proc. of the 6th Int. Coll. on Atomic Spectra and Oscillator Strengths, Victoria BC, Canada, 1998, Phys. Scripta T83, 162-173 (1999)

14. Cowley, C.R., Ryabchikova, T., Kupka, F., Bord, D.J., Mathys, G., Bidelman, W.P., *Abundances in Przybylski's star*, Mon. Not. Roy. Astron. Soc. 317, 299-309 (2000)

15. Gelbmann, M.J., Ryabchikova, T., Weiss, W.W., Piskunov, N.E., Kupka, F., Mathys, G., *Abundance analysis of roAp stars V: HD 166473*, Astron. Astrophys. 356, 200-208 (2000)

16. Montalbán, J., Kupka, F., D'Antona, F., Schmidt, W., *Convection in the atmospheres and envelopes of turnoff and giant branch stars of globular clusters*, Astron. Astrophys. 370, 982-990 (2001)

17. Piskunov, N., Kupka, F., *Model atmospheres with individualized abundances*, Astrophys. Jour. 547, 1040-1056 (2001)

18. D'Antona, F., Montalbán, J., Kupka, F., Heiter, U., *The Böhm-Vitense gap: the role of turbulent convection*, Astrophys. Jour. 564, L93-L96 (2002)

19. Heiter, U., Kupka, F., van 't Veer-Menneret, C., Barban, C., Weiss, W.W., Goupil, M.-J., Schmidt W., Katz, D., Garrido, R., *New grids of ATLAS9 atmospheres I: Influence of convection treatments on model structure and on observable quantities*, Astron. Astrophys. 392, 619-636 (2002)

20. Kochukhov, O., Landstreet, J.D., Ryabchikova, T., Weiss, W.W., Kupka, F., *Discovery of rapid radial velocity variations in the roAp star 10 Aql and possible pulsations of β CrB*, Mon. Not. Roy. Astron. Soc. 337, L1-L5 (2002)

21. Kupka, F., Montgomery, M.H., *A-star envelopes: a test of local and non-local models of convection*, Mon. Not. Roy. Astron. Soc. 330, L6-L10 (2002) (`http://dx.doi.org/10.1046/j.1365-8711.2002.05268.x`, preprint at `http://arxiv.org/abs/astro-ph/0112401`)

22. Smalley, B., Gardiner, R.B., Kupka, F., Bessell, M.S., *On the anomaly of Balmer line profiles of A type stars. Fundamental binary systems.*, Astron. Astrophys. 395, 601-609 (2002)

23. Barban, C., Goupil, M.-J., van 't Veer-Menneret, C., Garrido, R., Kupka, F., Heiter, U., *New grids of ATLAS9 atmospheres II: Limb-darkening coefficients for the Strömgren photometric system for A-F stars*, Astron. Astrophys. 405, 1095-1105 (2003)

24. Kupka, F., Paunzen, E., Maitzen, H.M., *The 5200-Å flux depression of chemically peculiar stars – I. Synthetic Δa photometry: the normality line*, Mon. Not. Roy. Astron. Soc. 341, 849-854 (2003)

25. Kupka, F., Paunzen, E., Iliev, I.Kh., Maitzen, H.M., *The 5200-Å flux depression of chemically peculiar stars – II. The cool CP and λ Bootis stars.*, Mon. Not. Roy. Astron. Soc. 352, 863-876 (2004)

26. Montalbán, J., D'Antona, F., Kupka, F., Heiter, U., *Convection in the atmospheres and envelopes of Pre-Main Sequence stars*, Astron. Astrophys. 416, 1081-1096 (2004)

27. Montgomery, M.H., Kupka, F., *White dwarf envelopes: further tests of non-local models of convection*, Mon. Not. Roy. Astron. Soc. 350, 267-276 (2004)

28. Nendwich, J., Heiter, U., Kupka, F., Nesvacil, N., Weiss, W.W., *Interpolation of Stellar Model Grids and Application to the NEMO Grid*, Comm. in Asteroseismology 144, 43-78 (2004)

29. Kupka, F., *Some physics we can learn from spectroscopy of A-type stars* in Proc. of the 8th Int. Coll. on Atomic Spectra and Oscillator Strengths, Madison WI, USA, 2004, Phys. Scripta T119, 20-25 (2005)

30. Samadi, R., Kupka, F., Goupil, M.-J., Lebreton, Y., van't Veer-Menneret, C., *Influence of local treatments of convection upon solar p mode excitation rates.*, Astron. Astrophys. 445, 233-242 (2006)

31. Frémaux, J., Kupka, F., Boisson, C., Joly, M., Tsymbal, V., *Prospects for population synthesis in the H band: NeMo grids of stellar atmospheres compared to observations*, Astron. Astrophys. 449, 109-125 (2006)

32. Belkacem, K., Samadi, R., Goupil, M.-J., Kupka, F., *A Closure Model with Plumes. I. The Solar Convection*, Astron. Astrophys. 460, 173-182 (2006)

33. Belkacem, K., Samadi, R., Goupil, M.-J., Kupka, F., Baudin, F., *A Closure Model with Plumes. II. Application to the Stochastic Excitation of Solar p-modes*, Astron. Astrophys. 460, 183-190 (2006)

34. Kupka, F., Robinson, F.J., *On the effects of coherent structures on higher order moments in models of solar and stellar surface convection*, Mon. Not. Roy. Astron. Soc. 374, 305-322 (2007) (free access at `http://dx.doi.org/10.1111/j.1365-2966.2006.11149.x`)

35. Muthsam, H.J., Löw-Baselli, B., Obertscheider, Chr., Langer, M., Lenz, P., Kupka, F., *High-resolution models of solar granulation: the two-dimensional case*, Mon. Not. Roy. Astron. Soc. 380, 1335-1340 (2007)

36. Samadi, R., Belkacem, K., Goupil, M.J., Dupret, M.-A., Kupka, F., *Modelling the excitation of acoustic modes in α Cen A*, Astron. Astrophys. 489, 291-299 (2008)

37. Landstreet, J.D., Kupka, F., Ford, H.A., Officer, T., Sigut, T.A.A., Silaj, J., Strasser, S., Townshend, A., *Atmospheric velocity fields in tepid main sequence stars*, Astron. Astrophys. 503, 973-984 (2009)

38. Kupka, F., Ballot, J., Muthsam, H.J., *Effects of resolution and helium abundance in A star surface convection simulations*, Comm. in Asteroseismology 160, 30-63 (2009)

39. Muthsam, H.J., Kupka, F., Löw-Baselli, B., Obertscheider, C., Langer, M., Lenz, P., *ANTARES – A Numerical Tool for Astrophysical RESearch With applications to solar granulation*, New Astronomy 15, 460–475 (2010)

40. Chaplin, W.J., et al. (with 108 co-authors including F. Kupka), *The asteroseismic potential of* Kepler*: first results for solar-type stars*, Astrophys. Jour. Letters 713, L169–L175 (2010)

41. Dubernet, M.L., et al. (with 31 co-authors including F. Kupka), *Virtual atomic and molecular data centre*, Jour. Quant. Spectr. Rad. Transfer 111, 2151–2159 (2010)

42. Karoff, C., et al. (with 48 co-authors including F. Kupka), *Asteroseismology of solar-type stars with Kepler I: Data analysis*, Astronon. Nachrichten 331, 972–976 (2010)

43. Kupka, F., Happenhofer, N., Higueras, I., Koch, O., *Total–Variation–Diminishing Implicit–Explicit Runge–Kutta Methods for the Simulation of Double-Diffusive Convection in Astrophysics*, J. Comput. Phys. 231, 3561–3586 (2012)

44. Happenhofer, N., Grimm-Strele, H., Kupka, F., Löw-Baselli, B., Muthsam, H., *A Low Mach Number Solver: Enhancing Applicability*, J. Comput. Phys. 236, 96–118 (2013)

45. Mundprecht, E., Muthsam, H.J., Kupka, F., *Multidimensional realistic modelling of Cepheid-like variables — I. Extensions of the ANTARES code*, Mon. Not. Roy. Astron. Soc. 435, 3191–3205 (2013)

46. Grimm-Strele, H., Kupka, F., Muthsam, H.J., *Curvilinear Grids for WENO Methods in Astrophysical Simulations*, Comp. Phys. Comm. 185 (3), 764–776 (2014)

47. Higueras, I., Happenhofer, N., Koch, O., Kupka, F., *Optimized Strong Stability Preserving IMEX Runge-Kutta Methods*, Jour. Comp. Appl. Math. 272, 116–140 (2014)

48. Rauer, H., et al. (with 160 co-authors including F. Kupka), *The PLATO 2.0 Mission*, Experimental Astronomy 38, 249–330 (2014)

49. Grimm-Strele, H., Kupka, F., Löw-Baselli, B., Mundprecht, E., Zaussinger, F., Schiansky, P., *Realistic Simulations of Stellar Surface Convection with ANTARES: I. Boundary Conditions and Model Relaxation*, New Astronomy 34, 278–293 (2015)

50. Grimm-Strele, H., Kupka, F., Muthsam, H.J., *Achievable Efficiency of Numerical Methods for Simulations of Solar Surface Convection*, Comp. Phys. Comm. 188, 7–20 (2015)

51. Mundprecht, E., Muthsam, H.J., Kupka, F., *Multidimensional realistic modelling of Cepheid-like variables – II: Analysis of a Cepheid model*, Mon. Not. Roy. Astron. Soc. 449, 2539–2552 (2015)

52. Kupka, F., Losch, M., Zaussinger, F., Zweigle, T., *Semi-convection in the ocean and in stars: A multi-scale analysis*, Met. Zeitschrift 24(3), 343–358 (2015), free access online at `http://dx.doi.org/10.1127/metz/2015/0643`

53. Kupka, F., Muthsam, H.J., *Modelling of Stellar Convection*, Living Rev. in Comp. Astrophys. 3:1 (2017), 159 pages, free access online at `http://dx.doi.org/10.1007/s41115-017-0001-9`

54. Kupka, F., Zaussinger, F., Montgomery, M.H., *Mixing and Overshooting in Surface Convection Zones of DA White Dwarfs: First Results from ANTARES*, Mon. Not. Roy. Astron. Soc. 474, 4660–4671 (2018) published online at `http://dx.doi.org/10.1093/mnras/stx3119`, preprint available at `http://arxiv.org/abs/1712.00641`

55. Belkacem, K., Kupka, F., Samadi, R., Grimm-Strele, H., *Solar p-mode damping rates: insight from a 3D hydrodynamical simulation*, Astron. Astrophys. 625, A20 (2019), 15 pages, published online at `https://doi.org/10.1051/0004-6361/201834223`, preprint available at `http://arxiv.org/abs/1903.05479`

56. Zaussinger, F., Kupka, F., *Layer formation in double-diffusive convection over resting and moving heated plates*, Theor. Comp. Fluid Dyn. 33, 383–409 (2019), published online at `https://doi.org/10.1007/s00162-019-00499-7`, preprint available at `http://arxiv.org/abs/1811.11800`

57. Kostogryz, N., Kupka, F., Piskunov, N., Fabbian, D., Krüger, D., Gizon, L., *Accurate short-characteristics radiative transfer in A Numerical Tool for Astrophysical RE-Search (ANTARES)*, Solar Physics 296, 46 (2021), 24 pages, published online at `https://doi.org/10.1007/s11207-021-01777-6`

58. Belkacem, K., Kupka, F., Philidet, J., Samadi, R., *Surface effects and turbulent pressure. Assessing the Gas-*$\Gamma 1$ *and Reduced-*$\Gamma 1$ *empirical models*, Astron. Astrophys. 646, L5 (2021), 7 pages, published online at `https://doi.org/10.1051/0004-6361/202040259`

59. Spada, F., Demarque, P., Kupka, F., *Stellar evolution models with entropy-calibrated mixing-length parameter: application to red giants*, Mon. Not. Roy. Astron. Soc. 504, 3128–3138 (2021), published online at `http://dx.doi.org/10.1093/mnras/stab1106`, preprint available at `http://arxiv.org/abs/2104.08067`

60. Kupka, F., Ahlborn, F., Weiss, A., *Stellar evolution models with overshooting based on 3-equation non-local theories: I. Physical basics and the computation of the dissipation rate*, Astron. Astrophys. 667, A96 (2022), 17 pages, published online at `https://doi.org/10.1051/0004-6361/202243125`

61. Ahlborn, F., Kupka, F., Weiss, A., Flaskamp, M., *Stellar evolution models with overshooting based on 3-equation non-local theories: II. Main sequence models of A- and B-type stars*, Astron. Astrophys. 667, A97 (2022), 17 pages, published online at `https://doi.org/10.1051/0004-6361/202243126`

1.3.2 Submitted

1. Kupka, F., Fabbian, D., Zaussinger, F., Krüger, D., Gizon, L., *Swaying oscillations in turbulent Rayleigh-Bénard convection at low Prandtl number*, submitted to Astron. Astrophys. (2023)

2. Koch, O., Acar, K., Auzinger, W., Kupka, F., Moser, B., *Adaptive exponential multi-operator splitting for MHD*, submitted to Int. Jour. Appl. Comp. Math. (2023)

1.4 Contributions in monographs

1.4.1 Appeared

1. Hillebrandt, W., Kupka, F., *An Introduction to Turbulence*, in *Interdisciplinary Aspects of Turbulence*, Lecture Notes in Physics Vol. 756, 1–20, edts. W. Hillebrandt, F. Kupka, Springer Verlag, Berlin (2009)

2. Kupka, F., *Turbulent Convection and Numerical Simulations in Solar and Stellar Astrophysics*, in *Interdisciplinary Aspects of Turbulence*, Lecture Notes in Physics Vol. 756, 49–105, edts. W. Hillebrandt, F. Kupka, Springer Verlag, Berlin (2009)

3. Zaussinger, F., Kupka, F., Muthsam, H.J., *Semiconvection*, in *Studying Stellar Rotation and Convection: Theoretical Background and Seismic Diagnostic*, Lecture Notes in Physics Vol. 865, 219–237, edts. M. Goupil, K. Belkacem, C. Neiner, F. Lignières, J.J. Green, Springer Verlag, Berlin (2013)

4. Kupka, F., *Thermal Convection in Stars and in Their Atmosphere*, in *Multi-Dimensional Processes In Stellar Physics*, edts. M. Rieutord, I. Baraffe, Y. Lebreton, EDP Sciences Proceedings, Les Ulis (2020), 69–110, preprint available at `https://arxiv.org/abs/2001.11540`

1.5 Conference reports

1.5.1 Refereed reports

1. Kupka, F., *New models for the convective flux in stellar atmospheres*, in *Stellar Surface Structure*, IAU Symposium 176, 557-564, edts. K.G. Strassmeier, J.L. Linsky, Kluwer, Dordrecht (1996)

2. Kupka, F., *Sparse grid spectral methods and some results from approximation theory*, in *Domain Decomposition 11*, 57-64, edts. C.-H.Lai, P.E.Bjørstad, M.Cross & O.B.Widlund, Greenwich, UK (1999) (`http://www.ddm.org/DD11/Kupka.pdf`)

3. Kupka, F., Muthsam, H.J., Zaussinger, F., Grimm-Strele, H., Happenhofer, N., Löw-Baselli, B., Mundprecht, E., Obertscheider, C., *Solar Surface Flow Simulations at Ultra-High Resolution*, in *High Performance Computing in Science and Engineering, Garching/Munich 2009*, 415–425, edts. S. Wagner, M. Steinmetz, A. Bode and M.M. Müller, Springer Verlag, Berlin (2010)

4. Kupka, F., and the VAMDC Collaboration (P.I. M.-L. Dubernet), *VAMDC as a resource for atomic and molecular data and the new release of VALD*, Baltic Astronomy 20(4), 503-510 (2011)

5. Happenhofer, N., Koch, O., Kupka, F., Zaussinger, F., *Total Variation Diminishing Implicit Runge–Kutta Methods for Dissipative Advection–Diffusion Problems in Astrophysics*, PAMM – Proceedings in Applied Mathematics and Mechanics 11, 777-778 (2011)

6. Kupka, F., Mundprecht, E., Muthsam, H.J., *Pulsation – Convection Interaction*, in *Precision Asteroseismology*, IAU Symposium 301, edts. W. Chaplin, J. Guzik, G. Handler, A. Pigulski, 177–184 (2014)

7. Kupka, F., Grimm-Strele, H., Happenhofer, N., Higueras, I., Koch, O., Muthsam, H.J., *Improved Time Integration for WENO Methods in Astrophysical Applications*, in *8th International Conference of Numerical Modeling of Space Plasma Flows (ASTRONUM 2013)*, edts. N.V. Pogorelov, E. Audit, G.P. Zank, Astron. Soc. Pacific Conf. Ser. Vol. 488, 243–248, San Francisco (2014)

8. Blies, P.M., Kupka, F., Muthsam, H.J., *The ANTARES Code: New Developments*, in *Numerical Modeling of Space Plasma Flows ASTRONUM-2014 (9th Annual International Conference)*, edts. N.V. Pogorelov, E. Audit, G.P. Zank, Astron. Soc. Pacific Conf. Ser. Vol. 498, 191–196, San Francisco (2015) (free access at `http://www.aspbooks.org/a/volumes/article_details/?paper_id=37447`)

9. Zaussinger, F., Kupka, F., Egbers, Ch., Neben, M., Hücker, S., Bahr, C., Schmitt, M., *Semi-convective layer formation*, in *11th International Conference on Numerical Modeling of Space Plasma Flows: ASTRONUM-2016*, edts. N.V. Pogorelov, E. Audit, G.P. Zank, Journal of Physics: Conf. Series Vol. 837, 012012 (2017) (7 pages)

10. Zaussinger, F., Kupka, F., Montgomery, M.H., Egbers, Ch., *Numerical simulation of DA white dwarf surface convection*, in *Numerical Modeling of Space Plasma Flows: ASTRONUM-2017 (12th International Conference*, edts. N.V. Pogorelov, E. Audit, G.P. Zank, Journal of Physics: Conf. Series Vol. 1031, 012013 (2018) (7 pages)

11. Krüger, D., Kostogryz, N., Fabbian, D., Kupka, F., *Improved Radiative Transfer in the ANTARES Code*, in *Numerical Modeling of Space Plasma Flows: ASTRONUM-2018 (13th International Conference*, edts. N.V. Pogorelov, E. Audit, G.P. Zank, Journal of Physics: Conf. Series Vol. 1225, 012017 (2019) (9 pages)

12. Fabbian, D., Kupka, F., Krüger, D., Kostogryz, N. M., Piskunov, N., *Shine BRITE: shedding light on stellar variability through advanced models*, in *Proceedings of the conference Stars and their Variability Observed from Space*, edts. C. Neiner, W. W. Weiss, D. Baade, R. E. Griffin, C. C. Lovekin, A. F. J. Moffat, Univ. of Vienna (2020), 155–159, online available at `https://ui.adsabs.harvard.edu/link_gateway/2020svos.conf..155F/PUB_PDF`

13. Kupka, F., *3D Hydrodynamical Simulations of Stellar Convection for Helio- and Asteroseismology*, in *Proceedings of the conference Stars and their Variability Observed from Space*, edts. C. Neiner, W. W. Weiss, D. Baade, R. E. Griffin, C. C. Lovekin, A. F. J. Moffat, Univ. of Vienna (2020), 209–214, online available at `https://ui.adsabs.harvard.edu/link_gateway/2020svos.conf..209K/PUB_PDF`

14. Kupka, F., Zaussinger, F., Fabbian, D., Krüger, D., *The ANTARES code: recent developments and applications*, in *Numerical Modeling of Space Plasma Flows: ASTRONUM-2019 (14th International Conference*, edts. N.V. Pogorelov, E. Audit, G.P. Zank, Journal of Physics: Conf. Series Vol. 1623, 012016 (2020) (11 pages)

1.5.2 Refereed reports, still in press

1. Kupka, F., *Modelling of Coherent Structures in Turbulent Convection*, in Turbulence and wave processes, edts. K. Moffat, D. Georgievsky, D. Millionshchikov, A. Petrosyan, 13 pages, accepted for publication in Journal of Physics: Conference Series (2024)

1.5.3 Other reports (including reviews and small refereed reports)

1. Kupka, F., *Beyond Mixing Length Theory*, in *M.A.S.S. – Model Atmospheres and Spectrum Synthesis*, edts. S.J. Adelman, F. Kupka and W.W. Weiss, ASP Conf. Ser. Vol. 108, 73–84, San Francisco (1996)

2. Ryabchikova, T.A., Piskunov, N.E., Kupka, F., Weiss, W.W., *The Vienna Atomic Line database: present state and future development*, in *International Cooperation in Dissemination of the Astronomical Data*, edts. F. Ochsenbein and A. Hearn, Baltic Astronomy 6(2), 244-247 (1997)

3. Audard, N., Kupka, F., Morel, P., Provost, J., Weiss, W.W., *Atmospheric structure and acoustic cut-off frequency of roAp stars*, in *Europ. Work. Group for CP stars, 26th Workshop*, edts. P. North, J. Žižňovský, Contrib. Astron. Obs. Skalnaté Pleso 27(3), 304-308 (1998)

4. Kupka, F., Piskunov, N.E., *CP star atmospheres based on individual ODFs*, in *Europ. Work. Group for CP stars, 26th Workshop*, edts. P. North, J. Žižňovský, Contrib. Astron. Obs. Skalnaté Pleso 27(3), 228-232 (1998)

5. Smalley, B., Kupka, F., *The effects of convection on the colours of A and F stars*, in *Europ. Work. Group for CP stars, 26th Workshop*, edts. P. North, J. Žižňovský, Contrib. Astron. Obs. Skalnaté Pleso 27(3), 233-237 (1998)

6. Kupka, F., *Computing solar and stellar overshooting with turbulent convection models. First tests of a fully non-local model.*, in *Theory and Tests of Convection in Stellar Structure*, edts. A. Gimenez, E.F. Guinan and B. Montesinos, ASP Conf. Ser. 173, 157-170, San Francisco (1999)

7. Weiss, W.W., Kupka, F., *Convection in Main Sequence Stellar Atmospheres*, in *Theory and Tests of Convection in Stellar Structure*, edts. A. Gimenez, E.F. Guinan and B. Montesinos, ASP Conf. Ser. 173, 21-30, San Francisco (1999)

8. Kupka, F., Ryabchikova, T.A., Piskunov, N.E., Stempels, H.C., Weiss, W.W., *VALD-2 - The new Vienna Atomic Line Data Base*, Baltic Astronomy 9(4), 590-594 (2000)

9. Kupka, F., *Turbulent convection: comparison of Reynolds stress models with numerical simulations*, Proceedings of the COROT/SWG Milestone 2000 meeting, eds. E. Michel, A. Hui-Bon-Hoa, Paris (2001)
(`http://www.lesia.obspm.fr/projets/corotswg/MilestoneProc/MilestoneFKa.ps`)

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1.7 Chaired panel discussions

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1.8 Technical reports

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1.9 ArXiv preprints

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1.11 Formal working group reports

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