

1 Publication List

1.1 Reviewed Articles

- Anahua, E., Barth, St., Peinke, J.: Markovian Power Curves for Wind Turbines, *Wind Energy* (2007), DOI: 10.1002/we.243
- Böttcher, F., Barth, St. and Peinke, J.: Small and Large Scale Fluctuations in Atmospheric Wind Speeds, *Stochastic Environmental Research and Risk Assessment (SERRA)* 21, 299 (2007)
- Gottschall, J., Peinke, J.: Stochastic modelling of a wind turbine's power output with special respect to turbulent dynamics, *Journal of Physics: Conference Series* 75, 012045 (2007)
- Gottschall, J., Peinke J.: How to improve the estimation of power curves for wind turbines, *Environ. Res. Lett.* 3, 015005 (2008)
- Hölling, M., Schulte, B., Barth, St. and Peinke J. : Sphere anemometer – a faster alternative solution to cup anemometer, *Journal of Physics: Conference Series* 75, 012064 (2007)
- Nitsche, R.; Nettingsmeier, J.; Rutkowski, T.; Wriggers, P.; Schaumann, P.: Numerische Berechnung des Tragverhaltens von gleitfest-vorgespannten Schraubenverbindungen unter Berücksichtigung von Adhäsion, *Bauingenieur* 82, Heft 2, S. 77-84, Springer, 2007, ISSN 0005-6650
- Palmer, T.N., R. Buizza, M. Leutbecher, R. Hagedorn, T. Jung, M. Rodwell, F. Vitart, J. Berner, E. Hagel, A. Lawrence, F. Pappenberger, Y-Y. Park, L. von Bremen, I. Gilmour: 2007, The Ensemble Prediction System - Recent and Ongoing Developments, Tech. Memo 540 at ECMWF, Reading, U.K., Oct. 2007. (available under <http://www.ecmwf.int/publications/library/do/refereces/show?id=88273>)
- Reetz, J., Gerasch, W.-J. and Rolfes, R.: A Method for Structural Health Monitoring of Offshore Wind Turbines. Proceedings of the 2nd IOMAC, Vol.1, Rune Brincker and Nis Moller, (2007)
- Saleck, N. and L. von Bremen (2007): Wind power forecast error smoothing within a wind farm. Second conference of the Science of Making Torque from Wind, Tech. University of Copenhagen, Denmark, August 2007. *J. Phys.: Conf. Ser.* 75 012051 (8pp) doi:10.1088/1742-6596/75/1/012051 (available under <http://www.iop.org/EJ/abstract/1742-6596/75/1/012051/>)
- Schaumann, P.; Keindorf, C.; Tomasch, F.: Experimentelle und numerische Untersuchungen von Knotenverbindungen für Tripods von Offshore-Windenergieanlagen, *Stahlbau* 76 (2007), no. 9, p. 627-635, Ernst & Sohn, ISSN 0038-9145
- Schaumann, P.; Böker, C.: Ermüdungsbeanspruchung aus Seegang bei aufgelösten Tragstrukturen, *Stahlbau* 76 (2007), no. 9, p. 620-626, Ernst & Sohn, ISSN 0038-9145
- Schaumann, P.; Keindorf, C.; Zacke, S.: Numerische Eigenspannungsermittlung an einer einlagig geschweißten Stumpfnah mit anschließender UIT-Behandlung, *Schweißen und Schneiden* 69 (2007), Heft 11, S. 590-599, DVS, 2007

- Sempreviva, Anna M., Rebecca Barthelmie, Gregor Giebel, Bernhard Lange and Abha Sood, 2007, Offshore wind resource assessment in European Seas, state-of-the-art. A survey within the FP6 "POW'WOW" Coordination Action Project. In Proceedings of EWEC 2007 Stoevesandt, B., Shishkin, A., Wagner, C., Peinke, J.: "Computational Simulation of the Turbulent Flow around an Airfoil using spectral/HP Method", Proceedings EWEC, 2007
- Sood, Abha, Kay Suselj, Michael Schmidt and Detlev Heinemann, 2007, The influence of the specific wind profile characteristics of the marine boundary layer on offshore wind power production. In the proceedings of EWEC, 7th-10th May 2007, Milan, Italy
- Sood, Abha, Kay Suselj, Detlev Heinemann, 2007, Wind resource assessment in the offshore and coastal domain of the German Bight using high resolution validated mesoscale simulations compared to the standard techniques. In the proceedings of EWEC, 7th-10th May 2007, Milan, Italy
- Sood, A., K. Suselj and D. Heinemann (2007), High resolution NWP North Sea wind forecasts in the marine atmospheric boundary layer, Conference Proceeding, EWEC 2007, Milan, Italy.
- Stoevesandt, B., Steigerwald, C., Shishkin, A., Wagner, C. and Peinke, J.: "Analysing flow structures around a blade using spectral/hp method and HPIV", J. Phys.: Conf. Ser. 75 012025 (8pp), doi:10.1088/1742-6596/75/1/012025, 4./5.10.2006
- Suselj, K., A. Sood, B. Canallidas and D. Heinemann (2007), The planetary boundary layer over The north sea: measurements and mesoscale simulations, Geophysical Research Abstracts, Vol 9, 09675, SRefID:1607-7962/gra/EGU2007-A-09675, Vienna, Austria
- von Bremen, L., Saleck, N., Graewe, U., Tambke, J., and Heinemann, D., 2007: Meteorological Models for prediction and simulation of wind power. In Proc. of Symposium "Energiemeteorologie" des Forschungsverbund Sonnenenergie (FVS), pp 31-43, Berlin, Germany, November 2006. ISSN 0949-1082. (available under <http://www.fv-sonnenenergie.de/publikationen/publikation/download/workshop-2006-energiemeteorologie/>)
- von Bremen, L., N. Saleck, and D. Heinemann, 2007: Enhanced regional forecasting considering single wind farm distribution for upscaling. Second conference of the Science of Making Torque from Wind, Tech. University of Copenhagen, Denmark, August 2007. J. Phys.: Conf. Ser. 75 012040 (9pp) doi:10.1088/1742-6596/75/1/012040 (available under <http://www.iop.org/EJ/abstract/1742-6596/75/1/012040/>)
- von Bremen, L. (2007): Combination of Deterministic and Probabilistic Meteorological Models to enhance Wind Farm Power Forecasts. Second conference of the Science of Making Torque from Wind, Tech. University of Copenhagen, Denmark, August 2007. J. Phys.: Conf. Ser. 75 012050 (8pp) doi:10.1088/1742-6596/75/1/012050 (available under http://www.iop.org/EJ/abstract/1742-6596/75/1/012050)

- Wolken-Möhlmann, G., Barth, St., Peinke, J.: Dynamic stall measurements on airfoils, PAMM Proc. Appl. Math. Mech. 7 (2007)
- Wolken-Möhlmann, G., Knebel, P., Barth, St., Peinke, J.: Dynamic lift measurements on a FX79W151A airfoil via pressure distribution on the wind tunnel wall, Journal of Physics: Conference Series 75, 012026 (2007)
- Zerbst, S.; Haake, G.; Reetz, J.; Lynch, J.; Rolfes, R.: Integral SHM-System for Offshore Wind Turbines using Smart Wireless Sensors, Proceedings of the 6th International Workshop of Structural Health Monitoring 2007, Volume 2, p. 1889-1896, San Francisco, Sept. 11-14, 2007.

1.2 Reviewed Conference Contributions

- Abdel-Rahman, K. & Achmus, M. : „Numerical Modelling of the Combined Axial and Vertical Loading of Vertical Piles“. Proceedings of the sixth European Conference on Numerical Methods in Geotechnical Engineering , Graz, Austria, 06-08 Sep. 2006 .
- Abdel-Rahman, K. & Achmus, M. „ Three Dimensional Numerical Modelling of Foundation Systems for Offshore Wind Energy Plants“. International Abaqus user Conference (AUC), Paris, France. 2007.
- Abdel-Rahman, K. „3-D numerische Modellierung von Offshore-Pfählen unter horizontaler Belastung mit verschiedenen Einwirkungsrichtungen“ („3-D numerical modelling of offshore piles under horizontal loading with different directions“), 19th Abaqus German User Meeting, Baden-Baden, 2007.
- Achmus, M. & Abdel-Rahman, K.: „Numerical Modelling of Vertical Piles in Clay under Inclined Compression Loading“. 12th International Colloquium on Structural and Geotechnical Engineering, Alexandria, Egypt 2007
- Achmus, M., Abdel-Rahman, K. & Kuo, Y.: „Numerical Modelling of large Diameter Steel Piles under Monotonic and Cyclic Horizontal Loading“. Tenth International Symposium on Numerical Models in Geomechanics, Greece, April 2007.
- Achmus, M., Abdel-Rahman, K., Kuo, Y.-S. & Peralta, P.: „Untersuchungen zum Tragverhalten von Monopilegründungen unter zyklischer Belastung“ („Investigations on the behaviour of monopile foundations under cyclic loads“). Pfahlsymposium, Braunschweig, 2007.
- Achmus, M., Abdel-Rahman, K. & Kuo, Y. „Zur Bemessung von Pfählen für Offshore-Windenergieanlagen unter statischen und zyklischen Lasten“, („Design of Pile Foundations for offshore wind energy Converters under static and cyclic Loading“). 5. Gigawind Symposium, Hannover, www.gigawind.de. 2007
- Achmus, M., Abdel-Rahman, K. & Tom Wörden, F. „Geotechnical Design of Piles supporting Structures for Offshore wind Energy Plants“, 7th International Offshore and Polar Engineering Conference (ISOPE) 2007.

- Achmus, M., Abdel-Rahman, K., Kuo, Y. „Behaviour of Large Diameter Monopiles under cyclic horizontal Loading”, 12th International Colloquium on Structural and Geotechnical Engineering, Cairo, Egypt. 2007.
- Barth, St. and Peinke, J. : Intermittence and scale separation above the North Sea EWEC 2007
- Betcke, J. W.H. (2007), Wetterabhängige Verbrauchslastprognose für das dezentrale Energiemanagement, Deutsch Österreichisch Schweizerische Meteorologentagung (DACH), Sept 2007, Hamburg (oral presentation).
- Blümel, M., Zielke, W.: Vergleich von Seegangsmessungen mit Boje und Radar an der Plattform FINO 1. 5. Symposium Offshore-Windenergie: Bau- und umwelttechnische Aspekte, Hannover, 2007.
- Gräwe, U., von Bremen, L., Saleck, N., Tambke, J., (2007), A new way to estimate the uncertainty in wind power predictions, Geophysical Research Abstracts, Vol. 9, 09614, European Geoscience Union (EGU) General Assembly, April 2007, Vienna, Austria. (oral presentation)
- Gottschall, J., Peinke, J. Stochastische Modellierung der Leistungsabgabe einer Windkraftanlage, 2. nationales PhD-Seminar der EAWE (Deutsche Sektion), Hannover, 22.03 - 23.03.2007
- Gottschall, J. and Peinke, J. Stochastic modelling of a wind turbine's power output with special respect to turbulent dynamics, The Science of Making Torque from Wind, Lyngby, Dänemark, 28.08. - 31.08.2007
- Hölling, M., Schulte, B., Barth, S., Peinke, J. Sphere anemometer a faster alternative solution to cup anemometry, The Science of Making Torque from Wind, Lyngby, Dänemark, 28.08. - 31.08.2007
- Kleinhans, D., Peinke, J. , Friedrich, R. , Synthetic turbulence models for wind energy applications, Workshop of Synthestic Turbulence Models, Sheffield, England, 29.03. - 30.03.2007
- Kohlmeier, M., Mittendorf, K., Kossel, T., Habbar, A., Zielke, W.: Wave Load Prediction Methods in Offshore Wind Turbine Modeling and their Influence on Fatigue Load Analysis. European Offshore Wind Conference & Exhibition 2007, Berlin, 2007.
- Kohlmeier, M., Habbar, A., Mittendorf, K., Zielke, W.: Integrale Last- und Strukturmodellierung von OWEA - Stand der Entwicklung. 5. Symposium Offshore-Windenergie: Bau- und umwelttechnische Aspekte, Hannover, 2007
- Medjroubi, W., Peinke, J., Stoevesandt, B. :“Numerical Simulation of Dynamic Stall using spectral/hp Methods”, 2. Summer School: Complex Motion in Fluids 2007, Krogerup, Denmark, 19.08. - 25.08.2007
- Medjroubi, W., Stoevesandt, B., Peinke, J. Numerical simulation of dynamic stall with adaptive grids for wind turbines airfoils, Mathematical Tools for Complex Systems in Science and Technology, Lyngby, Dänemark, 10.06. - 17.06.2007

- Mittendorf, K., Kohlmeier, M., Habbar, A., Zielke, W.: Seegangslasten und Strukturantworten der Messplattformen FINO 1 und Amrumbank. 5. Symposium Offshore-Windenergie: Bau- und umwelttechnische Aspekte, Hannover, 2007
- Mücke, T., Peinke, J., Fatigue loading on wind turbines in turbulent flows, EAWE 3. PhD Seminar on Wind Energy in Europe, Pamplona, Spanien, 10.10. - 11.10. 2007
- Obersteiner, Carlo, Hans Auer, Marian Klobasa, Lueder von Bremen, Sam C. Syvertsen, Marketing Wind Power on Electricity Wholesale Markets - An analysis of different options. In Proc. of 9th IAEE European Energy Conference, Florence, Italy, 2007.
- Obersteiner, Carlo, Erich Fuchs, Lueder von Bremen, Marian Klobasa, Stefan Kastner, Lukas Weißensteiner, Der Marktwert der Windenergie - Einflussparameter und Vermarktungsoptionen. In Proc. of 5. Internationale Energiewirtschaftstagung an der TU Wien, Vienna, Austria, 2007.
- Peinke, J., (invited talk) Wind energy : a challenging nonlinear problem, EGU General Assembly, Wien, Österreich, 16.04. - 20.04.2007
- Petroliagis, T.I., Lueder von Bremen & Detlev Heinemann, Deployment and validation of the Weather Research & Forecasting (WRF) model on the German Grid for wind power prediction applications, 7th EMS / 8th ECAM, 1-5 October 2007, San Lorenzo de El Escorial, Spain. (oral presentation)
- Ploski, Jan, Thomas Petroliagis, Detlev Heinemann, Thomas Scheidsteger, Wilhelm Hasselbring, Grid-based modeling in "Wissensnetz Energiemeteorologie". In Proc. of Deutsch Österreichische Schweizerische Meteorologentagung (DACH), Sept 2007, Hamburg, Germany. (oral presentation) (paper available under http://meetings.copernicus.org/dach2007/download/DACH2007_A_00350.pdf)
- Ploski, J., Thomas I. Petroliagis & Wilhelm Hasselbring, Implementing the Weather Research & Forecasting (WRF) model on the German Grid, 7th EMS / 8th ECAM, 1-5 October 2007, San Lorenzo de El Escorial, Spain. (oral presentation)
- Reetz, J.: Structural Health Monitoring of Offshore Wind Turbines using the Multiparameter Eigenvalue Problem. EAWE PhD-Seminar, University of Hannover, March 2007
- Reetz, J., Gerasch, W.-J. and Rolfes, R.: A Method for Structural Health Monitoring of Offshore Wind Turbines. 2nd International Operational Modal Analysis Conference (IOMAC), Copenhagen, Denmark, May 2007
- Saleck, N., F. Bertsch, L. von Bremen and D. Heinemann (2007): Accuracy of near real time updates in wind power forecasting with regard to different weather regimes, 7th EMS Annual Meeting / 8th European Conference on Applications of Meteorology, Oct 2007, San Lorenzo de El Escorial. (oral presentation)

- Saleck, N., L. von Bremen and D. Heinemann (2007): Zusammenhang von Großwetterlagen und Stabilität in Bezug auf die Windleistungsvorhersage, Deutsch Österreichische Schweizerische Meteorologentagung (DACH), Sept 2007, Hamburg. (oral presentation)
- Schaumann, P.; Wilke, F.: Design of Large Diameter Hybrid Connections Grouted with High Performance Concrete, 17th International Offshore and Polar Engineering Conference ISOPE 2007 Lisbon, Portugal, 2007
- Schaumann P.; Wilke F.: Grouted Joints für Offshore-WEA, GIGAWIND, 5. Symposium Offshore-Windenergie, April 2007
- Schaumann, P.; Keindorf, C.; Mickley, M.: Fatigue assessment of welded joints considering residual stresses due to welding process and post weld treatment, Fatigue Design 2007, Senlis, France, 11/2007
- Schaumann, P.; Keindorf, C.: Enhancing Fatigue Strength by Ultrasonic Impact Treatment for Welded Joints of Offshore Structures, ICSCS 2007, Manchester, 2007
- Schaumann, P; Böker, C.: Considering the distribution of wave directions in the fatigue design of support structures for offshore wind turbines, EWEC 2007 Conference and Exhibition, 7-10 May, Milan, Italy, 2007
- Schaumann, P.; Böker, C.: Tragstruktur – Lebensdaueranalysen und Prognoseverfahren, 5. Symposium Offshore-Windenergie Bau- und umwelttechnische Aspekte, 18. April 2007, Hannover, 2007
- Schaumann, P.; Böker, C.: Influence of wave spreading in short-term sea states on the fatigue of offshore support structures at the example of the FINO1-research platform, DEWEK 2006, Bremen, 2007
- Schaumann, P.; Böker, C.: Aktuelle Entwicklungen bei der Betriebsfestigkeitsanalyse von Tragstrukturen für Offshore Windenergieanlagen, 34. Tagung DVM-Arbeitskreis Betriebsfestigkeit, 10.+11. Oktober 2007, Wolfsburg, 2007
- Schaumann, P.; Keindorf, C.; Kirsch, T.: Multiphysikalische Prozesskopplung am Beispiel einer stumpf geschweißten und nachbehandelten Stahlplatte, Sysweld 2007
- Schaumann, P.; Keindorf, C.: Steigerung der Lebensdauer von Schweißverbindungen durch UIT, Tagungsband 5. Gigawind-Symposium, Offshore-Windenergie, 18.04.2007, Leibniz Universität Hannover, <http://www.gigawind.de/>
- Schaumann P.; Wilke F.: Grouted Joints für Offshore-WEA, Tagungsband 5. Gigawind-Symposium, Offshore-Windenergie, 18.04.2007, Leibniz Universität Hannover, <http://www.gigawind.de/>
- Schaumann, P.; Böker, C.: Influence of Local Joint Flexibilities on the Fatigue Life of Lattice Offshore Structures, European Offshore Wind 2007, Berlin, 2007
- Schulte, B., Hölling, M., Barth, S., Peinke, J., Development of a sphere-anemometer for measuring wind velocities in the open air test site, DPG Frühjahrstagung des Arbeitskreises Festkörperphysik, Regensburg, 26.03. - 30.03.2007

- Sempreviva, Anna M., Rebecca Barthelmie, Gregor Giebel, Bernhard Lange and Abha Sood, 2007, Offshore wind resource assessment in European Seas, state-of-the-art. A survey within the FP6 "POW'WOW" Coordination Action Project. Geophysical Research Abstracts, Vol. 9, 11100, 2007, SRef-ID: 1607-7962/gra/EGU2007-A-11100.
- Sood, Abha, Kay Suselj, 2007, Extreme Wind Statistics at the North Sea offshore site FINO at different temporal resolutions, Geophysical Research Abstracts, Vol. 9, 09980, 2007, SRef-ID: 1607-7962/gra/EGU2007-A-09980.
- Sood, Abha, Kay Suselj, Detlev Heinemann, 2007, Wind resource assessment in the offshore and coastal domain of the German bight using high resolution validated mesoscale simulations compared to the standard techniques, presented at EWEC, 7th-10th May 2007, Milan, Italy.
- Sood, Abha, Kay Suselj, 2007, Revisiting marine atmospheric boundary layer parameterisation: Validation over the North Sea 2004-2006 using FINO-1 data, 7th EMS Annual Meeting, EMS7/ECAM8 Abstracts, Vol. 4, EMS2007-A-00684, 2007.
- Sood, Abha, 2007, Measurement Data and Simulations for the Offshore Wind Industry, in the Proceedings of the 52nd IEA Topical Expert Meeting, Berlin.
- Stoevesandt, B., Steigerwald, C., Saxena, S., Shishkin, A., Peinke, J., Claus W., Direct numerical simulation of the turbulent flow around an airfoil using spectral/hp method, 2. nationales PhD-Seminar der EAWE (Deutsche Sektion), Hannover, 22.03. - 23.03.2007
- Stoevesandt, B., Steigerwald, C., Shishkin, A., Wagner, C., Peinke, J., Analysing flow structures around a blade using spectral/hp method and HPIV, The Science of Making Torque from Wind, Lyngby, Dänemark, 28.08. - 31.08.2007
- Stoevesandt, B., Shishkin, A., Wagner, C., Peinke, J., 3D DNS of the flow around an airfoil, EAWE, 3. PhD-Seminar of Wind Energy in Europe, Pamplona, Spanien, 10.10.-11.10.2007
- Stresing, R., Hölzer, M., Knebel, P., Peinke, J. Active grids and stochastic analysis of turbulence, iciam07 (GAMM), Zürich, Schweiz, 16.07. - 20.07.2007
- Suselj, K., Sood, A., 2007, Measuring and modelling wind speed in the marine atmospheric boundary layer, Oral presentation at the Global Atmospheric Boundary Layer Study (GABLS) Workshop in Stockholm, Sweden 19-21 June 2007.
- von Bremen, L., N. Saleck, and D. Heinemann (2007): Windleistungsvorhersage mit Eigenvektoren, Deutsch Österreichisch Schweizerische Meteorologentagung (DACH), Sept 2007, Hamburg. (oral presentation)
- von Bremen, L., J. Tambke, and D. Heinemann, 2007: Variability of 25 GW Offshore Wind Power - The German Scenario., Poster at European Wind Energy Conference, EWEC 2007, Milan, Italy. (Poster Award)

- von Bremen, L., V. Layec, K. Suselj, and A. Sood, 2007: Extreme Winds and Frequency of Strong Winds over the North Sea., Poster at European Wind Energy Conference EWEK 2007, Milan, Italy.
- von Bremen, L., N. Saleck, and D. Heinemann, 2007: A new Quality in Precise Off-shore Wind Power Prediction. Poster at European Wind Energy Conference EWEK 2007, Milan, Italy
- von Bremen, L., N. Saleck, A. Sood, K. Suselj, T. Petroligis and D. Heinemann, 2007: Single Wind Farm Power Forecasts by Combination of Meteorological Mod-els. In Proc. of 2nd Conference "Wind Energy Market in Poland", Warsaw, Poland, March 2007
- von Bremen, L., Impact of increasing spatial Model Resolution on the Accuracy of Wind Power Forecasts, 7th EMS / 8th ECAM, October 2007, San Lorenzo de El Escorial, Spain. (poster presentation)
- von Bremen, L., Renate Hagedorn & Thomas I. Petroligis, Towards probabilistic Wind Power Forecasting based on Ensemble Prediction Techniques, 7th EMS / 8th ECAM, October 2007, San Lorenzo de El Escorial, Spain. (oral presentation)
- Wächter, M., Nawroth, A., Peinke, J., Stochastic multiscale analysis and reconstruction of time series of small scale turbulence, Workshop of Synthetic Turbulence Models, Vilanova i la Geltru, Spanien, 29.11. - 30.11.2007
- Wolken-Möhlmann, G., Barth, S., Peinke, J., Dynamic stall measurements for airfoils iciam07 (GAMM), Zürich, Schweiz, 16.07. - 20.07.2007
- Wolken-Möhlmann, G., Knebel, P. , Parniak, A., Grüneberger, R., Peinke, J. Experimentelle Untersuchungen der dynamischen Auftriebsüberhöhung an Rotorprofilen, 2. nationales PhD-Seminar der EAWK (Deutsche Sektion), Hannover, 22.03 - 23.03.2007
- Wolken-Möhlmann, G., Knebel, P., Peinke, J., Barth, S., Dynamic lift measurements on an FX79W151A airfoil via pressure distribution on the wind tunnel walls, The Science of Making Torque from Wind, Lyngby, Dänemark, 28.08. - 31.08.2007
- Wolken-Möhlmann, G., Peinke, J., Dynamic lift measurements on an FX79W151A airfoil, EAWK, 3. PhD Seminar on Wind Energy in Europe, Pamplona, Spanien, 10.10. - 11.10. 2007
- Zerbst, S., Reetz, J. and Rolfes, R.: Methoden zur Schadenserkenung an Tragstrukturen von WEA. GIGAWIND-Symposium, University of Hannover, April 2007

1.3 Book Contributions

- Anahua, E., Barth, St. and Peinke, J. : Characterisation of the power curve for wind turbines by stochastic modeling, in Wind Energy - Proceedings of the Euromech Colloquium, eds. J. Peinke, P. Schaumann, St. Barth (Springer, Berlin 2007) p. 173 - 177
- Barth, St., Böttcher, F. and Peinke, J. : Superposition model for atmospheric turbulence, in Wind Energy - Proceedings of the Euromech Colloquium, eds. J. Peinke, P. Schaumann, St. Barth (Springer, Berlin 2007) p. 115 -118
- Böttcher, F., Peinke, J., Kleinhans, D. and Friedrich, R. : Handling systems driven by different noise sources: implication for power curve estimations, in Wind Energy - Proceedings of the Euromech Colloquium, eds. J. Peinke, P. Schaumann, St. Barth (Springer, Berlin 2007) p. 179 – 182
- Hölling, M., Barth, S., Peinke, J. and Rüdi, J.-D. : Anemometry in snow particle flows, In Progress in Turbulence II, Springer Proceedings in Physics 109, eds. M. Oberlack et.al. (Springer Berlin, 2007) p. 75
- Rauh, A., Anahua, E. , Barth, S. and Peinke, J. : Phenomenological response theory to predict power output, in Wind Energy - Proceedings of the Euromech Colloquium, eds. J. Peinke, P. Schaumann, St. Barth (Springer, Berlin 2007) p. 153 -158
- Schaumann, P.; Böker, C.; Rutkowski, T.; Wilke, F.: Tragstrukturen für Windenergieanlagen, in: Stahlbaukalender (Band 2007), Abschnitt 8, Ernst & Sohn, April 2007
- Schaumann, P.; Böker, C.: Stählerne Tragstrukturen für Offshore-Windenergieanlagen, Festschrift Rolf Kindmann, S. 53 – 67, Shaker, 2007, ISBN 978-3-8322-6634-9
- Stoevesandt, B., Peinke, J., Shishkin, A. and Wagner, C.: “Numerical simulation of dynamic stall using spectral /hp method”, in Wind Energy - Proceedings of the Euromech Colloquium, eds. J. Peinke, P. Schaumann, St. Barth (Springer, Berlin 2007) p. 241 – 244
- Suselj, K., A. Sood, V. Layec, L. von Bremen and D. Heinemann, 2007: Long-term Variability of the Wind Resources and Wind Conditions over the North Sea. In Status Report 2004-2007 of the Virtual Inst. of Energy Meteorology (vIEM). (available under https://bi.offis.de/viem/tiki-index.php?page_ref_id=85)
- Wessel, A., Peinke, J. and Lange, B. : Modelling turbulence intensities inside wind farms, in Wind Energy - Proceedings of the Euromech Colloquium, eds. J. Peinke, P. Schaumann, St. Barth (Springer, Berlin 2007) p. 253 - 256

1.4 Other Publications

Zielke, W.; Schaumann, P.; Böker, C.: GIGAWINDplus: Jahresbericht 2006, Hannover, 04/2007

2 Lectures at Universities

Heinemann, D.: Energy Meteorology (Wind) (lecture 5.06.203, Carl-von-Ossietzky University Oldenburg, winter course 06/07)

Kulschewski, U.: Lab Small Wind Turbine (lecture 07, 5.06.407 Carl-von-Ossietzky University Oldenburg, summer course 06/07)

Peinke, J.: Renewable Energies (seminar 5.04.450, Carl-von-Ossietzky University Oldenburg, winter course 06/07)

Peinke, J., Barth, S.: Wind Energy I (lecture 5.06.201, Carl-von-Ossietzky University Oldenburg, winter course 06/07)

Peinke, J.: Wind Energy Special (lecture 5.06.202, Carl-von-Ossietzky University Oldenburg, winter course 06/07)

Peinke, J, Heinemann, D.: actual topics in wind energy (lecture 5.04.455, Carl-von-Ossietzky University Oldenburg, winter course 06/07)

Schaumann, P.: Stability Problems (lecture), Leibniz Universität Hannover, Institute for Steel Construction, Summer Semester 2007

Schaumann, P. et al.: Support Structures of Wind Energy Converters II, Course G41, Postgraduate Studies Civil Engineering, Construction Engineering, Leibniz Universität Hannover, Winter Semester 2006/07

Schaumann, P.: Tower and Foundation, Lecturer notes of the postgraduate studies „Wind Energy - Technology and Management“, ForWind - Center for Wind Energy Research of the Universities of Oldenburg and Hannover, 2007

3 PhD Theses

Anahua, E.: Stochastic analysis of wind turbine power curves, PhD Thesis, University of Oldenburg, 2007

4 Diploma, Master and Bachelor Theses

Kirsch, T.: Experimentelle und numerische Untersuchungen zum transienten Temperaturfeld beim Schweißen einer Stumpfnahthverbindung, Diploma Thesis, Leibniz University Hannover, July 2007

Mickley, M.: Fatigue Resistance of Welded Joints Considering Residual Stresses due to Welding Process and Post Weld Treatment, Diploma Thesis, Leibniz University Hannover, July 2007

Lühning, J : Development of a Blade Element Model for Simulations of Turbulent Wind Turbine Inflows

Schulte, B.: Development and Investigation of the Dynamics of a Drag-Anemometer for Applications in Wind Energy

5 Invited talks at other universities

Peinke, J., 25.01.2007 Wind Energy: Turbulence and its Impact on Wind Turbines / System Science Colloquium, University at Osnabrück

Peinke, J., 20.03.2007 Multiscale Analysis of Time Series in Turbulent Flows / Ecole Normale Supérieure de Lyon, France

Peinke, J., 03.05.2007 New Insights into Turbulence / Institute for Mathematical Sciences and Department of Aeronautics, Imperial College, London, England

Peinke, J., 07.05.2007 Nonlinearities in Conversion of Wind Energy / Opening of the Center for Nonlinear Science, University of Münster

Peinke, J., 05.06.2007 Turbulence and its Impact on Conversion of Wind Energy / Energy Colloquium of fkWind, Bremerhaven University of Applied Sciences

Peinke, J., 03.07.2007 Sun, Water, Wind: Future Energies and Creator of Employment? / public panel discussion, University of Oldenburg

Peinke, J., 04.07.2007 ForWind's Activities in Research and Further Education / GE-Global Research, Garching

Peinke, J., 29.08.2007 New Insights into Turbulence / Niels Bohr Institute, University of Copenhagen, Denmark

Peinke, J., 11.10.2007 Modern Wind Power - Challenges in Sciences / 32nd Physics Teacher Training Course, University of Bayreuth