Pierre Pinson
Curriculum Vitae

March 2023

📍 Imperial College London
Dyson School of Design Engineering
London SW7 2AZ, U.K
🏠 pierrepinson.com
📞 +44 7551 280 628
✉ p.pinson@imperial.ac.uk
ORCID: 0000-0002-1480-0282

Pierre Pinson is internationally recognized as a leading academic in forecasting, (stochastic) optimization and game theory for energy systems and markets, thanks to his multidisciplinary expertise in Operations Research and Management Science, Statistics, Economics, Meteorology and Energy/Electrical Engineering. He has received a number of awards (e.g., IEEE Fellow, ISI/Clarivate Highly-cited Researcher, etc.) and has been a guest at a number of renown institutions (e.g., University of Oxford, Isaac Newton Institute – Cambridge, ECMWF). He is the Editor-in-Chief of the *International Journal of Forecasting*.

Education and Qualifications

2006   Ph.D.   Forecasting, Stochastic Optimization, Energy – Ecole des Mines de Paris, France
2002   M.Sc.   Applied Mathematics – National Institute for Applied Sciences (INSA Toulouse), France

Academic Employment History

2022–   **Chair** of Data-centric Design Engineering, Imperial College London, Dyson School
2022–   **Adj. Professor** of Operations Research – Technical University of Denmark (DTU)
2021–2022   **Professor** of Operations Research – Technical University of Denmark (DTU)
2013–2020   **Professor** of Energy Analytics & Markets – Technical University of Denmark (DTU)
2010–2011   **Scientist**, European Centre for Medium-range Weather Forecasts (ECMWF, UK)
2008–2013   **Assoc. Prof.** – Department of Applied Mathematics and Computer Science, DTU
2006–2008   **Post-doc. fellow**, **Assist. Prof.**, Department of Applied Mathematics and Computer Science, DTU

Other Positions

2022–   **Chief Scientist**, Halfspace.ai
2019–   **Editor-in-Chief**, *International Journal of Forecasting*
2019–   **Director**, International Institute of Forecasters
2022–   **Associate Editor**, *Nature, Scientific Data*
2021–   **Associate Editor**, *OR Spectrum*
2021   **Scientific Advisor**, Halfspace.ai
2019–   **Scientific Advisor**, Atmo.ai
2014–2019   **Associate Editor**, **Editor** *International Journal of Forecasting*
2010–2019   **Editor**, *Wind Energy*
2011–2016   **Editor**, *IEEE Transactions on Power Systems* (and *IEEE Power Engineering Letters*)

Visiting Positions

2019   Isaac Newton Institute for Mathematical Sciences, Cambridge, UK (Simons Fellow, 3 months)
2016   Ecole Nationale Supérieure, Rennes, France (Visiting Professor, 1 week)
2009   University of Washington, Department of Statistics (Visiting Researcher, 2 months)
2009   University of Oxford, Mathematical Institute (Visiting Researcher, 1 month)

Recent Honours and Awards

2019-...   ISI/Clarivate Highly-cited Researcher 2019, 2020, 2021 and 2022 (cross-field)
2020   IEEE Fellow
2019   Simons Fellowship, Isaac Newton Institute, Cambridge, UK
2018   IDA Elektropris
2017   Emerald Citation of Excellence, 2017, for highly cited paper in Business and Economics
2014   ERC Consolidator Grant application given a grade A (ranked highly, though not funded)

Impact and Citations

➤ ISI Web of knowledge: ∼10.000 (h-index = 52)

➤ Scopus: ∼12.000 (h-index = 56)

➤ Google Scholar: ∼21.000 (h-index = 72)

➤ Numerous highly-cited papers (currently 11 in ISI Web of Science, top 1% citations in their field)

Current Membership

➤ International Institute of Forecasters (IIF)
➤ Institute for Operations Research and Management Sciences (INFORMS)
➤ Institute of Electrical and Electronics Engineers (IEEE)

Teaching and Education

2023–...	"From data to product" (M.Sc./M.Eng., Imperial College London)
2023–...	"Game theory and mechanism design" (M.Sc./M.Eng., Imperial College London)
2022	"42586 - Decisions under uncertainty" (B.Sc., DTU)
2020–2020	"31762 - Introduction to energy analytics" (B.Sc., DTU)
2016–2020	"31765 - Optimization in modern power systems" (M.Sc., DTU)
2014–2020	"31761 - Renewables in electricity markets" (M.Sc., DTU)
2016	"31xxx - Game theory in electricity markets" (M.Sc./Ph.D., DTU)
2016–2020	"31792 - Advanced optimization and game theory for energy systems" (Ph.D., DTU)
2015–2020	Leader of the study line "Electric Energy Systems" of the M.Sc. in Sustainable Energy (DTU)
2010–2020	Ad-hoc courses in e.g. forecasting, stochastic optimization, etc.

Service

➤ **Academic evaluation and recruiting** (>20 positions): INSEAD (France), EPFL (Switzerland), Masdar Institute of Technology, Aarhus University, Colorado School of Mines, University of Michigan, University College London, Mines Paris-Tech, Chinese University of Hong Kong, Tallinn University of Technology, UiT (Norway), Tafila Technical University (Jordan), Aalto University (Finland). University of Reading (UK), University of Bath (UK), Darmouth College (USA)

➤ **PhD evaluation** (>60 theses): University of Oxford, ETH, EPFL, Monash University, University of Sidney, Mines Paris-Tech, Aarhus University, Aalborg University, UCD, KTH, CBS, Luleå University, NTNU, Ecole Polytechnique, Toulouse University, Ecole Centrale Paris/Supelec, TU Eindhoven, Bonn University, Rennes University, University of Zaragoza, University of Catalogna, University of Castilla La Mancha, University Politecnica Madrid, University of Innsbruck, University of Thessaloniki, University of Twente, ENS, University Paris-Saclay, University of Copenhagen, Uppsala University, University of Liege, University of Twente, etc.

➤ **Reviewer for research project proposals**: Academy of Finland, Swedish Research Council, Aut. Province of Bolzano (Austria), FONDECYT, (Chile), ANR (France), FNR (Luxembourg), NWO (The Netherlands), MITACS (Canada), Zhejiang University (China), City University of Hong Kong (China), FNR (Belgium), ETH (Zurich), etc.

➤ **Reviewer for book proposals**: IET, John Wiley & Sons, Springer, Elsevier

➤ **Journal referee** for more than 60 journals in operations research and management science, statistics, meteorology, climate science, economics, energy engineering, electrical engineering, environmental engineering

➤ **Conferences** (Scientific/Programme Committee/Reviewer): PSCC 2022,PMAPS 2020, PSCC 2020, IEEE PowerTech 2019, PSCC 2018, IEEE PowerTech 2017, PSCC 2016, IEEE PowerTech 2015, ACC 2015, etc.

Funding

Throughout my academic career, I have received substantial funding from varied sources e.g. national and international research councils, as well as industry directly. Nearly all of these grants were for collaborative research and innovation projects, with partners in both academia and industry. The total external funding I have attracted for my research activities is in the order of 12 M€.

➤ **Smart4RES** (EU H2020, 2019-2022): New business models in forecasting, e.g. based on distributed learning and data markets.

➤ **EMBER** (EU H2020, 2019-2022): Proposal and analysis of consumer-centric markets for heat (and electricity).

➤ **SCA** (EU Interreg H2020, 2017-2020): Focus on energy communities in the Øresund region

➤ **Best Paths** (EU H2020, 2014-2018): Scalability and benefit assessment of HVDC system deployment over Europe.

➤ **Ecogrid EU** (EU FP7, 2013-2015): Market concepts proposal and evaluation for the optimal management of demand response.

➤ **TWENTIES** (EU FP7, 2012-2013): Probablistic forecasting for Dynamic Line Rating.

➤ **WIRE** (EU COST, 2011-2015): Participant in renewable energy forecasts benchmarking group, as well as dynamic line rating working group.

➤ **Wind in Øresund** (EU Interreg, 2008-2012): Education, research and demonstration for the optimal integration of wind energy in the Øresund region. Close collaboration with Lund University, Centre for Mathematical Sciences.

➤ **SafeWind** (EU FP7, 2008-2012): Coordination of research and development efforts towards new methods for wind power forecasting accounting for spatio-temporal characteristics, regimes, etc.

➤ **NORSEWInD** (EU FP7, 2008-2012): Research and development efforts for demonstrating benefits of having wind measurements from the North Sea area for improvement of wind power forecasts over the Denmark region.

➤ **ANEMOS.plus** (EU FP6, 2008-2011): Coordination of the evaluation of the benefits of wind power forecasts and associated uncertainty estimation when used in decision-making

➤ **ViPES2X** (Danish EUDP, 2023-2025): Forecasting and data-driven optimization for the operation of portfolios of flexible energy assets (e.g., electrolysers, batteries, etc.).

➤ **Multi-DC** (Danish IF, 2016-2020): Market-based operation of DC links and DC grids with application to the Scandinavian region.

➤ **The Energy Collective** (Danish ForskEL, 2016-2020): Design and demonstration of consumer centric and community-driven electricity markets based on peer-to-peer exchanges.

➤ **Ecogrid 2.0** (Danish EUDP, 2016-2018): Market concepts proposal and evaluation for the optimal management of demand response.

➤ **EnergyLab Nordhavn** (Danish EUDP, 2015-2018): Research and demonstration on integrated market solutions (e.g., heat and electricity) at both wholesale and retail levels.

➤ **CITIES** (Danish DSF, 2014-2019): Research Centre on IT-Intelligent Energy Systems - Leading work package on Intelligent Aggregation and Markets.

➤ **PROAIN** (Danish-Chinese IF, 2014-2017): Danish-Chinese collaborative project on active distibution grid management. Large demonstration in China led by Tsinghua University and State Grid Corporation of China

➤ **'5s' - Future Electricity Markets** (Danish DSF, 2013-2017): Research in the design of future electricity markets, with focus on market clearing mechanisms, better integration of demand and its flexibility, impact on investment, etc.

➤ **FastWind** (Danish ForskEL, 2011-2013): Fast monitoring and verification of wind turbine and wind farm power curves

➤ **EaseWind** (Danish ForskEL, 2011-2014): Relevant forecasting products for wind turbines to provide ancillary services in order to support grid operations

➤ **Radar@Sea** (Danish ForskEL, 2009-2012): Short-term wind (power) forecasting at Horns Rev using real-time data from an onsite Local Area Weather Radar

➤ **GigaStore - Potential for solar-powered heat storage in Denmark** (Industrial, 2016-2017): Collaborative project with European Energy A/S (Denmark) to model and analyse large-scale renewable heat storage in the Danish market context

➤ **HD-RESforecasts - High-dimensional modelling and forecasting for renewable energy generation** (Industrial, EDF, 2016-2017): Collaborative project with EDF (France) to develop approaches for high-dimensional forecasting of wind and solar power generation

➤ **GenScen - Scenario generation for renewable generation in operational and planning studies** (Industrial, EPRI, 2015): Collaborative project with EPRI (US) to produce scenario of renewable energy generation in large dimensions for test cases in the UK and Midwest US

➤ **Spatio-temporal correction of wind power forecasts** (Industrial, DONG Energy, 2009-2011): Collaborative project with DONG Energy and ENFOR A/S in order to improve wind power forecast accuracy for the DONG wind energy portfolio

➤ **Impact of stochastic generation on EU cross-border flows** (Industrial, APG Verbund, 2010): Collaborative project with APG Verbund for analysing and demonstrating the effect of wind energy production on the flows over the whole European power system

Books

1. J.M. Morales, A. Conejo, H. Madsen, **P. Pinson**, M. Zugno (2014). *Integrating renewables in electricity markets: Operational problems*. Springer, International Series in Operations Research and Management Science, vol. 205

Journal Articles

1. **P. Pinson**, G. Kariniotakis (2004). On-line assessment of prediction risk for wind power production forecasts. *Wind Energy* 7(2), pp. 119-132
2. H. Madsen, **P. Pinson**, T.S. Nielsen, H.Aa. Nielsen, G. Kariniotakis (2005). Standardizing the performance evaluation of short-term wind power prediction models. *Wind Engineering* 29(6), pp. 475-489
3. **P. Pinson**, S. Lozano, I. Marti, G. Kariniotakis, G. Giebel (2007). ViLab: a Virtual Laboratory for collaborative research on wind power forecasting. *Wind Engineering* 31(2), pp. 117-121
4. **P. Pinson**, H.Aa. Nielsen, J.K. Møller, H. Madsen, G. Kariniotakis (2007). Nonparametric probabilistic forecasts of wind power: required properties and evaluation. *Wind Energy* 10(6), pp. 497-516
5. **P. Pinson**, C. Chevallier, G. Kariniotakis (2007). Trading wind generation with short-term probabilistic forecasts of wind power. *IEEE Transactions on Power Systems* 22(3), pp. 1148-1156

6. **P. Pinson**, L.E.A. Christensen, H. Madsen, P.E. Sørensen, M.H. Donovan, L.E. Jensen (2008). Regime-switching modelling of the fluctuations of offshore wind generation. *Journal of Wind Engineering and Industrial Aerodynamics* 96(12), pp. 2327-2347

7. P. Sørensen, N.A. Cutululis, A. Vigueras-Rodriguez, H. Madsen, **P. Pinson**, L.E. Jensen, J. Hjerrild, M. Donovan (2008). Modelling of power fluctuations from large offshore wind farms. *Wind Energy* 11(1), pp. 29-43

8. **P. Pinson**, H.Aa. Nielsen, H. Madsen, T.S. Nielsen (2008). Local linear regression with adaptive orthogonal fitting for the wind power application. *Statistics and Computing* 18(1), pp. 59-71

9. B. Klöckl, G. Papaefthymiou, **P. Pinson** (2008). Probabilistic tools for planning and operating power systems with distributed energy storage. *E I Elektrotechnik und Informationstechnik* 125(12), pp. 460-465

10. **P. Pinson**, T.S. Nielsen, H.Aa. Nielsen, N.K. Poulsen, H. Madsen (2009). Temperature prediction at critical points in district heating systems. *European Journal of Operational Research* 194(1), pp. 163-176

11. **P. Pinson**, G. Papaefthymiou, B. Klöckl, H.Aa. Nielsen, H. Madsen (2009). From probabilistic forecasts to statistical scenarios of short-term wind power production. *Wind Energy* 12(1), pp. 51-62

12. **P. Pinson**, H. Madsen (2009). Ensemble-based probabilistic forecasting at Horns Rev. *Wind Energy* 12(2), pp. 137-155

13. **P. Pinson**, H.Aa. Nielsen, H. Madsen, G. Kariniotakis (2009). Skill forecasting from ensemble predictions of wind power. *Applied Energy* 86(7-8), pp. 1326-1334

14. P. Giabardo, M. Zugno, **P. Pinson**, H. Madsen (2010). Feedback, competition and stochasticity in a day-ahead electricity market. *Energy Economics* 32(2), pp. 292-301

15. T. Jónsson, **P. Pinson**, H. Madsen (2010). On the market impact of wind energy forecasts. *Energy Economics* 32(2), pp. 313-320

16. **P. Pinson**, P. McSharry, H. Madsen (2010). Reliability diagrams for nonparametric density forecasts of continuous variables: accounting for serial correlation. *Quarterly Journal of the Royal Meteorological Society* 136(646), pp. 77-90

17. C.L. Vincent, G. Giebel, **P. Pinson**, H. Madsen (2010). Resolving non-stationary spectral signals in wind speed time-series using the Hilbert-Huang transform. *Journal of Applied Meteorology and Climatology* 49(2), pp. 253-267

18. **P. Pinson**, G. Kariniotakis (2010). Conditional prediction intervals of wind power generation. *IEEE Transactions on Power Systems* 25(4), pp. 1845-1856

19. F. Thordarson, H. Madsen, H.Aa. Nielsen, **P. Pinson** (2010). Conditional weighted combination of wind power forecasts. *Wind Energy* 13(8), pp. 751-763

20. J. Tastu, **P. Pinson**, E. Kotwa, H.Aa. Nielsen, H. Madsen (2011). Spatio-temporal analysis and modeling of wind power forecast errors. *Wind Energy* 14(1), pp. 43-60

21. G. Reikard, **P. Pinson**, J. Bidlot (2011). Forecasting ocean waves - The ECMWF wave model and time-series methods. *Ocean Engineering* 38(10), pp. 1089-1099

22. C. Gallego, **P. Pinson**, H. Madsen, A. Costa, A. Cuerva (2011). Influence of local wind speed and direction on wind power dynamics - Application to offshore very short-term prediction. *Applied Energy* 88(11), pp. 4087-4096

23. C.L. Vincent, **P. Pinson**, G. Giebel (2011). Wind fluctuations over the North Sea. *International Journal of Climatology* 31(11), pp. 1584-1595

24. **P. Pinson**, G. Reikard, J. Bidlot (2012). Probabilistic forecasting of the wave energy flux. *Applied Energy* 93, pp. 364-370

25. P.-J. Trombe, **P. Pinson**, H. Madsen (2012). A general probabilistic forecasting framework for offshore wind power fluctuations. *Energies* 5(3), pp. 621-657

26. **P. Pinson**, H. Madsen (2012). Adaptive modeling and forecasting of wind power fluctuations with Markov-switching autoregressive models. *Journal of Forecasting* 31(4), pp. 281-313

27. J.M. Morales, **P. Pinson**, H. Madsen (2012). A transmission-cost-based model to estimate the amount of market-integrable wind resources. *IEEE Transactions on Power Systems* 27(2), pp. 1060-1069

28. **P. Pinson**, R. Girard (2012). Evaluating the quality of scenarios of short-term wind power generation. *Applied Energy* 96, pp. 12-20

29. **P. Pinson** (2012). Very short-term probabilistic forecasting of wind power with generalized logit-Normal distributions. *Journal of the Royal Statistical Society, Series C* 61(4), pp. 555-576

30. **P. Pinson** (2012). Adaptive calibration of (u, v)-wind ensemble forecasts. *Quarterly Journal of the Royal Meteorological Society* 138(666), pp. 1273-1284

31. **P. Pinson**, R. Hagedorn (2012). Verification of the ECMWF ensemble forecasts of wind speed against analyses and observations. *Meteorological Applications* 13(4), pp. 484-500

32. T. Jónsson, **P. Pinson**, H.Aa. Nielsen, H. Madsen, T.S. Nielsen (2013). Forecasting day-ahead electricity prices accounting for the impact of wind power generation. *IEEE Transactions on Sustainable Energy* 4(1), pp. 210-218

33. O. Corradi, H. Ochsenfeld, H. Madsen, **P. Pinson** (2013). Controlling electricity consumption by forecasting its response to varying prices *IEEE Transactions on Power Systems* 28(1), pp. 421-429

34. M. Zugno, J.M. Morales, **P. Pinson**, H. Madsen (2013). A bilevel model for electricity retailers participation in a demand response market environment. *Energy Economics* 36, pp. 182-197

35. S. Alessandrini, S. Sperati, **P. Pinson** (2013). A comparison between the ECMWF and COSMO Ensemble Prediction Systems applied to short-term wind power forecasting. *Applied Energy* 107, pp. 271-280

36. M. Zugno, J.M. Morales, **P. Pinson**, H. Madsen (2013). Pool strategy of a price-maker wind power producer. *IEEE Transactions on Power Systems* 28(3), pp. 3440-3450

37. M. Zugno, T. Jónsson, **P. Pinson** (2013). Trading wind energy on the basis of probabilistic forecasts of both wind generation and market quantities. *Wind Energy* 16(6), pp. 909-926

38. C. Wan, Z. Xu, **P. Pinson** (2013). Direct interval forecasting of wind power. *IEEE Transactions on Power Systems* (Power Engineering Letters) 28(4), pp. 4877-4878

39. M. Zugno, **P. Pinson**, H. Madsen (2013). The impact of wind power on European cross-border power flows. *IEEE Transactions on Power Systems* 28(4), pp. 3566-3575

40. G. Dorini, **P. Pinson**, H. Madsen (2013). Chance-constrained optimization of demand response to price signals. *IEEE Transactions on Smart Grid* 4(4), pp. 2072-2080

41. **P. Pinson** (2013). Wind energy: Forecasting challenges for its optimal management. *Statistical Science* 28(4), pp. 564-585 (invited)

42. P.-J. Trombe, **P. Pinson**, H. Madsen (2014). Automatic classification of offshore wind regimes with weather radar observations. *IEEE Journal of Selected Topics in Earth Observations and Remote Sensing* 7(1), pp. 116-125

43. T. Hong and co-authors (2014). Guest editorial: Special section on analytics for energy forecasting with applications to smart grid. *IEEE Transactions on Smart Grid* 5(1), pp. 399-401

44. J. Tastu, **P. Pinson**, P.-J. Trombe, H. Madsen (2014). Probabilistic forecasts of wind power generation accounting for geographically dispersed information. *IEEE Transactions on Smart Grid* 5(1), pp. 480-489

45. J.M. Morales, M. Zugno, S. Pineda, **P. Pinson** (2014). Electricity market clearing with improved dispatch of stochastic producers. *European Journal of Operational Research* 235(3), pp. 765-774

46. J.M. Morales, M. Zugno, S. Pineda, **P. Pinson** (2014). Redefining the merit order of stochastic generation in forward markets. *IEEE Transactions on Power Systems* (Power Engineering Letters) 29(2), pp. 992-993

47. **P. Pinson** (2014). Comments on: Space-time wind speed forecasting for improved power system dispatch. *TEST* 23(1), pp. 26-29

48. T. Hong, **P. Pinson**, S. Fan (2014). Global Energy Forecasting Competition 2012 (GEFCom2012). *International Journal of Forecasting* 30(2), pp. 357-363

49. C. Wan, Z. Xu, **P. Pinson**, Z.Y. Dong, K.P. Wong (2014). Probabilistic forecasting of wind power generation using extreme learning machine. *IEEE Transactions on Power Systems* 29(3): pp. 1033-1044 (invited)

50. C. Wan, Z. Xu, **P. Pinson**, Z.Y. Dong, K.P. Wong (2014). Optimal prediction intervals of wind power generation. *IEEE Transactions on Power Systems* 29(3), pp. 1166-1174

51. T.I. Petroliagis, **P. Pinson** (2014). Early warnings of extreme winds utilising the ECMWF Extreme Forecast Index. *Meteorological Applications* 21(2), pp. 171-185

52. T. Jónsson, **P. Pinson**, H.Aa. Nielsen, H. Madsen (2014). Exponential smooting approaches for prediction in real-time electricity markets. *Energies* 7(6), pp. 3710-3732

53. **P. Pinson**, J. Tastu (2014). Discussion of "Prediction intervals for short-term wind farm generation forecasts" and "Combined nonparametric prediction intervals for wind power generation". *IEEE Transactions on Sustainable Energy* 5(3), pp. 1018-1019

54. C. Zhang, Y. Ding, N.C. Nordentoft, **P. Pinson**, J. Østergaard (2014). FLECH - A Danish market solution for DSO congestion management through DER flexibility services. *Journal of Modern Power System and Clean Energy* 2(2), pp. 126-133

55. N. O'Connell, **P. Pinson**, H. Madsen, M. O'Malley (2014). Benefits and challenges of electric demand response: A critical review. *Renewable & Sustainable Energy Reviews* 39, pp. 686-699

56. T. Jónsson, **P. Pinson**, H.Aa. Nielsen, H. Madsen (2014). Density forecasting of day-ahead electricity prices using time-adaptive quantile regression. *Energies* 7(9), pp. 5523-5547

57. P.-J. Trombe, **P. Pinson**, *et al.* (2014). Weather radars - the new eyes of offshore wind farms. *Wind Energy* 17(11), pp. 1767-1787

58. H.M.I. Pousinho, J. Contreras, **P. Pinson**, V.M.F. Mendes (2015). Offering strategies for hybrid concentrated solar-fossil power plants through robust optimization. *International Journal of Electric Power and Energy Systems* 67, pp. 639-650

59. **P. Pinson**, M. O'Malley (2015). Foreword for the special section on wind and solar energy: uncovering and accommodating their impacts on electricity markets. *IEEE Transactions on Power Systems* 30(3), pp. 1557-1559

60. S. Sperati, S. Alessandrini, **P. Pinson**, G. Kariniotakis (2015). The "WIRE" benchmarking exercise on short-term forecasting models for renewable power generation. *Energies* 8(9), pp. 9594-9619

61. A. Staid, **P. Pinson**, S.D. Guikema (2015). Probabilistic maximum-value wind prediction for offshore environments. *Wind Energy* 18(10), pp. 1725-1738

62. A. Michiorri, H.M. Nguyen, S. Alessandrini, J.B. Bremnes, S. Dierer, E. Ferrero, B.E. Nygaard, **P. Pinson**, N. Thomaidis, S. Uski-Joutsenvuo (2015). Forecasting for dynamic line rating. *Renewable & Sustainable Energy Reviews* 52, pp. 1713-1730

63. H. Ding, **P. Pinson**, Z. Hu, Y. Song (2016). Integrated bidding and operating strategies for wind farms enhanced with storage. *IEEE Transactions on Sustainable Energy* 7(1), pp. 163-172

64. Z. Ben Bouallègue, **P. Pinson**, P. Friederichs (2016). Quantile forecast discrimination ability and value. *Quarterly Journal of the Royal Meteorological Society* 141(693), pp. 3415-3424

65. G. He, Q. Chen, C. Kang, **P. Pinson**, Q. Xia (2016). Optimal bidding strategy of battery storage in power markets considering performance based regulation and battery cycle life. *IEEE Transactions on Smart Grid* 7(5), pp. 2359-2367

66. J. Dowell, **P. Pinson** (2016). Very-short-term probabilistic wind power forecasts by sparse vector autoregression. *IEEE Transactions on Smart Grid* 7(2), pp. 763-770

67. N. O'Connell, **P. Pinson**, H. Madsen, M. O'Malley (2016). Economic dispatch of demand-side balancing through asymmetric block offers. *IEEE Transactions on Power Systems* 31(4), pp. 2999-3007

68. N. Davis, **P. Pinson**, A. Hahmann, N.-E. Clausen, M. Zagar (2016). Identifying and characterizing the impact of turbine icing on wind farm power generation. *Wind Energy* 19(8), pp. 1503-1518

69. W.A. Bukhsh, C. Zhang, **P. Pinson** (2016). A multiperiod OPF model under renewable generation uncertainty and demand-side flexibility. *IEEE Transactions on Smart Grid* 7(3), pp. 1495-1503

70. L. Exizidis, J. Kazempour, **P. Pinson**, Z. De Greve, F. Vallée (2016). Sharing wind power forecasts in electricity markets: A numerical analysis. *Applied Energy* 176, pp. 65-73

71. F. Golestaneh, **P. Pinson**, H.B. Gooi (2016). Generation and evaluation of space-time trajectories of photovoltaic generation. *Applied Energy* 176, pp. 80-91

72. C. Zhang, Q. Wang, J. Wang, M. Korpås, **P. Pinson**, J. Østergaard, M.E. Khodayar (2016). Trading strategies for distribution company with stochastic distributed energy resources. *Applied Energy* 177, pp. 625-635

73. T. Soares, **P. Pinson**, T.V. Jensen, H. Morais (2016). Optimal offering strategies for wind power in energy and primary reserve markets. *IEEE Transactions on Sustainable Energy* 7(3), pp. 1036-1045

74. H. Ding, **P. Pinson**, Z. Hu, Y. Song (2016). Optimal offering for wind-storage systems using linear decision rules. *IEEE Transactions on Power Systems* 31(6), pp. 5061-5070

75. S. Delikaraoglou, J.M. Morales, **P. Pinson** (2016). Impact of inter- and intra-regional coordination in markets with a large renewable component. *IEEE Transactions on Power Systems* 31(6), pp. 4755-4764

76. A. Papakonstantinou, **P. Pinson** (2016). Information uncertainty in electricity markets: Introducing probabilistic offers. *IEEE Transactions on Power Systems* 31(6), pp. 5202-5203

77. M. Xu, **P. Pinson**, Z. Lu, Y. Qiao, Y. Min (2016). Adaptive robust polynomial regression for power curve modeling with application to wind power forecasting. *Wind Energy* 19(12), pp. 2321-2336

78. Z. Ben Bouallègue, T. Heppelmann, S. Theis, **P. Pinson** (2016). Generation of scenarios from calibrated ensemble forecasts with a dynamic ensemble copula coupling approach. *Monthly Weather Review* 31(5), pp. 4737-4750

79. F. Golestaneh, **P. Pinson**, H.B. Gooi (2016). Very short-term nonparametric probabilistic forecasting of renewable energy generation - with application to solar energy. *IEEE Transactions on Power Systems* 31(5): 3850-3863

80. T. Hong, **P. Pinson**, S. Fan, H. Zareipour, A. Troccoli, R. Hyndman (2016). Probabilistic energy forecasting: Global Energy Forecasting Competition 2014 and beyond. *International Journal of Forecasting* 32(3), pp. 896-913

81. P. Wang. F. Wen, **P. Pinson**, J. Østergaard (2017). A ranking method for peak load shifting considering different types of data. *ASCE Journal of Energy Engineering* 142(4), art. no. 04016016

82. Y. Zhan, Q.P. Zheng, J. Wang, **P. Pinson** (2017). Decision-dependent stochastic generation expansion planning with large amounts of wind power *IEEE Transactions on Power Systems* 32(4): 3015-3026

83. **P. Pinson**, L. Mitridati, C. Ordoudis, J. Østergaard (2017). Towards fully renewable energy systems – Experience and trends in Denmark. *CSEE Journal of Power and Energy Systems* 3(1): 26-35

84. E.M. Larsen, **P. Pinson**, F. Leimgruber, F. Judex (2017). From demand response evaluation to forecasting - Methods and results from the EcoGrid EU experiment. *Sustainable Energy, Grids and Networks* 10: 75-83

85. F. Bona, N. Gast, J.-Y. Le Boudec, **P. Pinson**, D. Tomozei (2017). Attribution mechanisms for ancillary service costs induced by variability in power delivery. *IEEE Transactions on Power Systems* 32(3): 1891-1901

86. H. Ding, **P. Pinson**, Z. Hu, J. Wang, Y. Song (2017). Optimal offering and operating strategy for a large wind-storage system as a price maker. *IEEE Transactions on Power Systems* 32(6): 4904-4913

87. T.V. Jensen, **P. Pinson** (2017). RE-Europe: a large-scale dataset for a future renewable-energy based European power system. *Nature, Scientific Data* 4, art. no. 170175

88. Z. Xu, L.L. Lai, K.P. Wong, **P. Pinson**, F. Li (2017). Guest editorial: Special section on emerging informatics for risk hedging and decision making in smart grids. *IEEE Transactions on Industrial Informatics* 13(5): 2507-2510

89. T. Soares, T.V. Jensen, N. Mazzi, **P. Pinson**, H. Morais (2017). Optimal offering and allocation policies for wind power in energy and reserve markets. *Wind Energy* 20(11) pp. 1851-1870

90. A Lenzi, **P. Pinson**, L.K.H. Clemmensen, G. Guillot (2017). Spatial models for probabilistic prediction of wind power with application to yearly average and high temporal resolution data. *Stochastic Environmental Research Risk Assessment* 31(7), pp. 1615-1631

91. L. Exizidis, J. Kazempour, **P. Pinson**, Z. De Grève, F. Vallée (2017). Impact of public aggregate wind forecasts on electricity market outcomes. *IEEE Transactions on Sustainable Energy* 8(4), pp. 1394-1405

92. **P. Pinson**, T. Baroche, F. Moret, T. Sousa, E. Sorin, S. You (2017). The emergence of consumer-centric electricity markets. *Utilities* (in Chinese)

93. C. Zhang, Q. Wang, J. Wang, J.M. Morales, **P. Pinson**, J. Østergaard (2018). Real-time procurement strategies of a proactive distribution company with aggregator-based demand response. *IEEE Transactions on Smart Grid* 9(2), pp. 766-776

94. Q. Wang, C. Zhang, J. Wang, **P. Pinson**, J. Østergaard (2018). Real-time trading strategies of proactive DISCO with heterogeneous DG owners. *IEEE Transactions on Smart Grid* 9(3), pp. 1688-1697

95. G. Le Ray, **P. Pinson**, E.M. Larsen (2018). Evaluating price-based demand response in practice – With application to the EcoGrid EU experiment. *IEEE Transactions on Smart Grid* 9(3), pp. 2304-2313

96. N. Mazzi, J. Kazempour, **P. Pinson** (2018). Price-taker offering strategy in electricity pay-as-bid markets. *IEEE Transactions on Power Systems* 33(2), pp. 2175-2183

97. L. Mitridati, **P. Pinson** (2018). Bayesian approach to unveiling supply curves in electricity markets. *IEEE Transactions on Power Systems* 33(3), pp. 2610-2620

98. R.J. Hyndman, X. Liu, **P. Pinson** (2018). Visualizing big energy data. *IEEE Power Energy Magazine* 16(3), special issue on Big Data Analytics, pp. 18-25

99. Y. Xiao, X. Wang, **P. Pinson**, X. Wang (2018). A local energy market for electricity and hydrogen. *IEEE Transactions on Power Systems* 33(4), pp. 3898-3908

100. T.V. Jensen, J. Kazempour, **P. Pinson** (2018). Cost-optimal ATCs in zonal electricity markets. *IEEE Transactions on Power Systems* 33(4), pp. 3624-3633

101. A. Lenzi, I. Steinsland, **P. Pinson** (2018). Benefits of spatio-temporal modelling for short term wind power forecasting at both individual and aggregated levels. *Environmetrics* 29(3), art. no. 2493

102. F. Golestaneh, **P. Pinson**, R. Azizipanah-Abarghooee, H.B. Gooi (2018). Ellipsoidal prediction regions for multivariate uncertainty characterization. *IEEE Transactions on Power Systems* 33(4), pp. 4519-4530

103. J. Kazempour, **P. Pinson**, B. Hobbs (2018). Stochastic market design with revenue adequacy and cost recovery by scenario: benefits and costs. *IEEE Transactions on Power Systems* 33(4), pp. 3531-3545

104. S. Cros, **P. Pinson** (2018). Prévision météorologique pour les énergies renouvelables. *La Météorologie* 100, pp. 1-8

105. Y. Zhao, L. Ye, **P. Pinson**, Y. Tang (2018). Correlation-constrained and sparsity-controlled vector autoregressive model for spatio-temporal wind power forecasting. *IEEE Transactions on Power Systems* 33(5), pp. 3531-3545

106. T. Soares, R. Bessa, **P. Pinson**, H. Morais (2018). Active distribution grid management based on robust AC optimal power flow. *IEEE Transactions on Smart Grid* 9(6), pp. 6229-6241

107. G. Le Ray, **P. Pinson** (2019). Online adaptive clustering algorithm for load profiling. *Sustainable Energy, Grids and Networks* 17, art. no. 100181

108. T. Sousa, T. Soares, **P. Pinson**, F. Moret, T. Baroche, E. Sorin (2019). Peer-to-peer and community-driven markets: a comprehensive review. *Renewables & Sustainable Energy Reviews* 104, pp. 367-378

109. L. Halilbasic, **P. Pinson**, S. Chatzivasileiadis (2019). Convex relaxations and approximations of chance-constrained AC-OPF problems. *IEEE Transactions on Power Systems* 34(2), pp. 1459-1470

110. E. Sorin, **P. Pinson**, L.A. Bobo (2019). Consensus-based negotiation mechanisms for differentiated products in peer-to-peer electricity markets. *IEEE Transactions on Power Systems* 34(2), pp. 994-1004

111. L. Bai, **P. Pinson** (2019). Forecast reconciliation in day-ahead wind power forecasting. *Energies* 12, art. no. 1112

112. F. Golestaneh, **P. Pinson**, H.G. Gooi (2019). Polyhedral predictive regions for power system applications. *IEEE Transactions on Power Systems* 34(1), pp. 693-704

113. C. Ordoudis, **P. Pinson**, J.M. Morales (2019). An integrated market for electricity and natural gas systems with stochastic power producers. *European Journal of Operational Research* 272(2), pp. 642-654

114. T. Baroche, **P. Pinson**, R. Le Goff Latimier, H. Ben Ahmed (2019). Exogenous approach to grid cost allocation in peer-to-peer electricity markets. *IEEE Transactions on Power Systems* 34(4), pp. 2553-2564

115. L. Exizidis, J. Kazempour, A. Papakonstantinou, **P. Pinson**, Z. de Greve, F. Vallee (2019). Incentive-compatibility in a two-stage stochastic electricity market with high wind power penetration. *IEEE Transactions on Power Systems* 34(4), pp. 2846-2858

116. J.W. Messner, **P. Pinson** (2019). Online adaptive LASSO estimation in Vector Auto Regressive models for wind power forecasting in high dimension. *International Journal of Forecasting* 35(4), pp. 1485-1498

117. S. Delikaraoglou, **P. Pinson** (2019). Optimal allocation of HVDC interconnections for exchange of energy and reserve capacity services. *Energy Systems* 10(3), pp. 635-675

118. T. Hong, **P. Pinson**, (2019). Energy forecasting in the big data world. *International Journal of Forecasting* 35(4), pp. 1387-1388

119. V. Dvorkin, J. Kazempour, **P. Pinson** (2019). Electricity market equilibrium under information asymmetry. *Operations Research Letters* 47(6), pp. 521-526

120. F. Moret, **P. Pinson** (2019). Energy Collectives: a community and fairness based approach to future electricity markets. *IEEE Transactions on Power Systems* 34(5), pp. 3994-4004

121. P. Nystrup, E. Lindström, H. Madsen, **P. Pinson** (2020). Temporal hierarchies with autocorrelation for load forecasting. *European Journal of Operational Research* 280(3), pp. 876-888

122. A. Papakonstantinou, G. Champeri, S. Delikaraoglou, **P. Pinson**, (2019). Optimal trading strategies for stochastic producers participating in financial and electricity markets. *Wind Energy* 22(11), pp. 1487-1499

123. P. Lauret, M. David, **P. Pinson** (2019). Verification of solar irradiance probabilistic forecasts. *Solar Energy* 194, pp. 254-271

124. M.H. Christensen, **P. Pinson**, R. Li (2019). Demand-side management of heat in smart homes: Living-lab experiments. *Energy* 195, art. no. 116993

125. C. Gilbert, J.W. Messner, **P. Pinson**, P.-J. Trombe, R. Verzijlbergh, P. van Dorp, H. Jonker (2020). Statistical post-processing of turbulence-resolving weather forecasts for offshore wind power forecasting. *Wind Energy* 23(4), pp. 884-897

126. C. Ziras, J. Kazempour, E.C. Kara, H.W. Bindner, **P. Pinson**, S. Kiliccote (2020). A mid-term DSO market for capacity limits: How to estimate opportunity costs of aggregators? *IEEE Transactions on Smart Grid* 11(1), pp. 334-345

127. G. Le Ray, **P. Pinson** (2020). The ethical smart grid: Enabling a fruitful and long-lasting relationship between utilities and electricity consumers. *Energy Policy*, 140, art. no. 111258

130. **P. Pinson** (2020). Editorial. *International Journal of Forecasting* 36(2), pp. 229-231

131. C. Sweeney, R. Bessa, J. Browell, **P. Pinson** (2020). The future of forecasting for renewable energy. *WIREs: Energy and Environment* 9(2), art. no. e365

132. N. Viafora, S. Delikaraoglou, **P. Pinson**, J. Holbøll (2020). Chance-constrained optimal power flow with non-parametric probability distributions of dynamic line ratings. *International Journal of Electric Power and Energy Systems* 114, art. no. 105389

133. L. Mitridati, J. Kazempour, **P. Pinson** (2020). Heat and electricity market coordination: A scalable complementarity approach. *European Journal of Operational Research* 283(3), pp. 1107-1123

134. A. Schwele, J. Kazempour, **P. Pinson** (2020). Do unit commitment constraints affect generation expansion planning? A scalable stochastic model. *Energy Systems* 11(2), pp. 247-282

135. J. Le Gal La Salle, J. Badosa, M. David, **P. Pinson**, P. Lauret (2020). Added-value of ensemble prediction system on the quality of solar irradiance probabilistic forecasts. *Renewable Energy* 162, pp. 1321-1339

136. C. Ordoudis, S. Delikaraoglou, J. Kazempour, **P. Pinson** (2020). Market-based coordination for integrated electricity and natural gas systems under uncertain supply. *European Journal of Operational Research* 287(3), pp. 1105-1119

137. F. Pourahmadi, J. Kazempour, C. Ordoudis, **P. Pinson**, S.H. Hosseini (2020). Distributionally robust chance-constrained generation expansion planning. *IEEE Transactions on Power Systems* 35(4), pp. 2888-2903

138. J. W. Messner, **P. Pinson**, J. Browell, M. B. Bjerregård, I. Schicker (2020). Evaluation of wind power forecasts – An up-to-date view. *Wind Energy* 23(6), pp. 1461-1481

139. D. Thomas, J. Kazempour, A. Papakonstantinou, **P. Pinson**, O. Deblecker, C.S. Ioakimidis (2020). A local market mechanism for physical storage rights. *IEEE Transactions on Power Systems* 35(4), pp. 3087-3099

140. F. Moret, A. Papakonstantinou, **P. Pinson** (2020). Heterogenous risk preferences in community-based electricity markets. *European Journal of Operational Research* 287(1), pp. 36-48

140. M Kezunovic, **P. Pinson**, Z. Obradovic, S. Grijalva, T. Hong, R. Bessa (2020). Big data analytics for future electricity grids. *Electric Power Systems Research* 189, art. no. 106788

141. A. Ratha, A. Schwele, J. Kazempour, **P. Pinson**, S.S. Torbaghan, A. Virag (2020). Affine policies for flexibility provision by natural gas networks to power systems. *Electric Power Systems Research* 189, art. no. 106565

142. Y. Xiao, X. Wang, **P. Pinson**, X. Wang (2020). Transactive energy based aggregation of prosumers. *IEEE Transactions on Smart Grid* 11(4), pp. 3302-3312

143. T. Hong, P. Pinson, Y. Wang, R. Weron, D. Yang, H. Zareipour (2020). Energy forecasting: A review and outlook. *IEEE Open Access Journal of Power and Energy* 7, pp. 376-388

144. C. Di Modica, **P. Pinson**, S. Ben Taieb (2021). Online forecast reconciliation in wind power prediction. *Electric Power Systems Research* 190, art. no. 106637

145. L. Mitridati, J. Kazempour, **P. Pinson** (2021). Design and game-theoretical analysis of community-based market mechanisms in heat and electricity systems. *Omega* 99, art. no. 102177

146. B. Sommer, **P. Pinson**, J.W. Messner, D. Obst (2021). Online distributed learning in wind power forecasting. *International Journal of Forecasting* 37(1), pp. 205-223

147. C. Goncalves, R. Bessa, **P. Pinson** (2021). A critical overview of privacy-preserving approaches to collaborative forecasting. *International Journal of Forecasting* 37(1), pp. 322-342

148. C. Goncalves, **P. Pinson**, R. Bessa (2021). Towards data markets in renewable energy forecasting. *IEEE Transactions on Sustainable Energy* 12(1), pp. 533-542

149. Z. Guo, **P. Pinson**, S. Chen, Q. Yang, Z. Yang (2021). Chance-constrained peer-to-peer joint energy and reserve market considering renewable energy uncertainty. *IEEE Transactions on Smart Grid* 12(1), pp. 798-809

150. C. Ordoudis, V. A. Nguyen, D. Kuhn, **P. Pinson** (2021). Energy and reserve dispatch with distributionally robust joint chance constraints. *Operations Research Letters* 49(3), pp. 291-299

151. A.M. Radoszynski, **P. Pinson** (2021). Electric demand response and bounded rationality – Mean-field control for large populations of heterogenous bounded-rational agents. *Philosophical Transactions of the Royal Society A* 379(2202), art. no. 20190429

152. N. Viafora, S. Delikaraoglou, **P. Pinson**, G. Hug, J. Holbøll (2021). Dynamic reserve and transmission capacity allocation in wind-dominated power systems. *IEEE Transactions on Power Systems* 36(4), pp. 3017-3028

153. G. Tsaousoglou, J. S. Giraldo, **P. Pinson**, N. G. Paterakis (2021). Mechanism design for fair and efficient DSO flexibility markets. *IEEE Transactions on Smart Grid* 12(3), pp. 2249 - 2260

154. L. Bobo, L. Mitridati, J. Kazempour, J. Taylor, **P. Pinson** (2021). Price-region bids in forward electricity markets. *European Journal of Operational Research*, 295(3), pp. 1056-1073

155. C. Ziras, T. Sousa, **P. Pinson** (2021). What do prosumer marginal utility functions look like? Derivation and analysis. *IEEE Transactions on Power Systems* 36(5), pp. 4322-4330

156. A. Schwele, J. Kazempour, C. Ordoudis, **P. Pinson** (2021). Virtual bidding for coordination of power and natural gas markets under uncertainty. *Computational Management Science* 18, pp. 505-538

157. Z. Guo, **P. Pinson**, S. Chen, Q. Yang, Z. Yang (2021). Online optimization for real-time peer-to-peer market mechanisms. *IEEE Transactions on Smart Grid* 12(5), pp. 4151-4163

158. L. Frölke, T. Sousa, **P. Pinson** (2021). A network-aware market mechanism for decentralized district heating systems. *Applied Energy* 306(A), art. no. 117956

159. A. Tosatto, F. Moret, T. Baroche, **P. Pinson** (2021). Loss allocation in joint transmission and distribution peer-to-peer markets. *IEEE Transactions on Power Systems* 36(3), pp 1833-1842

160. V. Dvorkin Jr., F. Fioretto, P. Van Hentenryck, J. Kazempour, **P. Pinson** (2021). Differentially-private optimal power flow for distribution grids. *IEEE Transactions on Power Systems* 36(3), pp. 2186-2196

161. L. Han, **P. Pinson**, J. Kazempour (2022). Trading data for wind power forecasting: A regression market with Lasso regularization. *Electric Power Systems Research* 212, art. no. 108442

162. L. Bai, J. Wang, **P. Pinson** (2022). Variable heat pricing to steer the flexibility of heat demand response in district heating systems. *Electric Power Systems Research* 212, art. no. 108383

163. L Herre, **P. Pinson**, S. Chatzivasileiadis (2022). Reliability-aware probabilistic reserve procurement. *Electric Power Systems Research* 212, art. no. 108345

164. V. Dvorkin , A. Botterud , D. Mallapragada , J. Kazempour, **P. Pinson** (2022). Multi-stage linear decision rules for stochastic control of natural gas networks with linepack. *Electric Power Systems Research* 212, art. no. 108388

165. V. Dvorkin, A. Ratha, **P. Pinson**, J. Kazempour (2022). Stochastic control and pricing for natural gas networks. *IEEE Transactions on Control of Networked Systems* 9(1), pp. 450-462

162. Z. Guo, **P. Pinson**, S. Chen, Q. Yang, Z. Yang (2022). An asynchronous online negotiation mechanism for real-time peer-to-peer electricity markets. *IEEE Transactions on Power Systems* 37(3), pp. 1868-1880

163. F. Petropoulos and co-authors (2022). Forecasting: Theory and practice. *International Journal of Forecasting* 38(3), pp. 705-871

164. A. Tosatto, X. M. Beseler, J. Østergaard, P. Pinson, S. Chatzivasileiadis (2022). North Sea energy islands: Impact on national markets and grids. *Energy Policy* 167, art. no. 112907

165. **P. Pinson**, L. Han, J. Kazempour (2022). Regression markets and application to energy forecasting. *TOP* 30, pp. 533-573

167. H. Wen, **P. Pinson**, J. Ma, J. Gue, Z. Jin (2022). Continuous and distribution-free probabilistic wind power forecasting: A conditional normalizing flow approach. *IEEE Transactions on Sustainable Energy* 13(4), pp. 2250-2263

168. J. Wang, **P. Pinson**, S. Chatzivasileiadis, M. Panteli, G. Strbac, V. Terzija (2023). On machine learning-based techniques for future sustainable and resilient energy systems. *IEEE Transactions on Sustainable Energy*, in press/available online

169. A. Ratha, **P. Pinson**, H. Le Cadre, A. Virag, J. Kazempour (2023). Moving from linear to conic markets for electricity. *European Journal of Operational Research*, in press/available online

170. H. Wen, **P. Pinson**, J. Gue, Z. Jin (2023). Wind energy forecasting with missing values within a fully conditional specification framework. *International Journal of Forecasting*, in press/available online

171. A. Raja, J. Kazempour, **P. Pinson**, S. Grammatico (2023). A market for trading forecasts: A wagering mechanism. *International Journal of Forecasting*, in press/available online

172. **P. Pinson** (2023). Distributionally robust trading strategies for renewable energy producers. *IEEE Transactions on Energy Markets, Policy and Regulation*, in press/available online

173. **P. Pinson** (2023). What may future electricity markets look like. *Journal of Modern Power and Clean Energy Systems*, in press/available online

Submitted & Working Papers

174. M.A. Muñoz, **P. Pinson**, J. Kazempour (2023). Online decision-making for trading wind energy

175. S. R. Pandey, **P. Pinson**, P. Popovski (2023). Participation and data valuation in IoT data markets through distributed coalitions

176. A. Manzano Kharman, C. Jursitzky, Q. Zhou, P. Ferraro, J. Marecek, **P. Pinson**, R. Shorten (2023). On the design of decentralised data markets

177. N. Qi, **P. Pinson**, M. R. Almassalkhi, L. Cheng, Y. Zhuang (2023). Chance-constrained economic dispatch of generic energy storage under decision-dependent uncertainty

178. G. Dantas, A. Costa, O. Vilela, **P. Pinson** (2023). Statistical downscaling of local wind speed based on objective definition of the set of regressor variables

179. V. Dvorkin, F. Fioretto, P. Van Hentenryck, **P. Pinson**, J. Kazempour (2023). Privacy-preserving convex optimization: When differential privacy meets stochastic programming

180. B. Sommer, K Holst, **P. Pinson** (2023). Direct multi-step ahead forecasting with state-space models
181. A. Pierrot, **P. Pinson** (2023). On tracking varying bounds when forecasting bounded time series
182. G. Vassos, K. Holst, **P. Pinson**, R. M. Lusby (2023). A simulation framework of procurement operations in the container logistics industry
183. D. van der Meer, **P. Pinson**, S. Camal, G.Kariniotakis (2023). CRPS-based online learning for nonlinear probabilistic forecast combination

Conference Publications (peer-reviewed)

1. **P. Pinson**, G. Kariniotakis (2003). Wind power forecasting using fuzzy-neural networks enhanced with on-line prediction risk assessment. IEEE PowerTech Conference 2003, Bologna, Italy
2. **P. Pinson**, G. Kariniotakis (2003). On-line assessment of prediction risk for wind power production forecasts. European Wind Energy Conference 2003, Madrid, Spain
3. G. Kariniotakis, **P. Pinson** (2004). Uncertainty of short-term wind power forecasts - A methodology for on-line assessment. PMAPS 2004, IEEE Conference, 'Probabilistic Methods Applied to Power Systems', pp. 729-736, Ames, Iowa (USA), pp. 729-736 *(invited)*
4. **P. Pinson**, G. Kariniotakis, D. Mayer (2004). Uncertainty and prediction risk assessment of short-term wind power forecasts. EAWE Conference 2004, 'The science of making torque from wind', Delft, The Netherlands
5. **P. Pinson**, H.Aa. Nielsen, T.S. Nielsen, H. Madsen, G. Kariniotakis (2006). Properties of interval and quantile forecasts of wind generation and their evaluation. European Wind Energy Conference 2006, Athens, Greece
6. **P. Pinson**, J. Juban, G. Kariniotakis (2006). On the quality and value of probabilistic forecasts of wind generation. PMAPS 2006, IEEE Conference, 'Probabilistic Methods Applied to Power Systems', Stockholm, Sweden, June 2006, pp. 1-7 *(invited)*
7. **P. Pinson**, G. Papaefthymiou, B. Klockl, H.Aa. Nielsen (2007). Generation of statistical scenarios of short-term wind power production. IEEE PowerTech Conference 2007, Lausanne, Switzerland
8. **P. Pinson**, H.Aa. Nielsen, H. Madsen, G. Kariniotakis (2007). Skill forecasting from different wind power ensemble prediction methods. J. Phys.: Conf. Ser. 75 012046, The 2nd Conference on 'The Science of Making Torque from Wind', Lyngby, Denmark
9. **P. Pinson**, H. Madsen, P.E. Sørensen, J.R. Kristoffersen, L.E. Jensen (2008). Forecasting the potential magnitude of power fluctuations at large offshore wind farms with an adaptive Markov-switching approach. EWEC'08, European Wind Energy Conference, Scientific Track, Brussels, Belgium
10. B. Klöckl, G. Papaefthymiou, **P. Pinson** (2008). Probabilistic tools for planning and operating power systems with distributed energy storage. CIGRE 2008, Paris, France
11. G. Papaefthymiou, **P. Pinson** (2008). Modeling of spatial dependence in wind power forecasting uncertainty. PMAPS 2008, IEEE Conference, 'Probabilistic Methods Applied to Power Systems', Puerto Rico *(invited)*
12. **P. Pinson**, H. Madsen (2008). Probabilistic forecasting of wind power at the minute time-scale with Markov-switching autoregressive models. PMAPS 2008, IEEE Conference, 'Probabilistic Methods Applied to Power Systems', Puerto Rico
13. **P. Pinson**, H. Madsen, H.Aa. Nielsen, T.S. Nielsen, N.K. Poulsen (2008). Modeling the nonlinear temperature response of district heating systems for model predictive control applications. 11th Annual Symposium on District Heating and Cooling, Reykjavik, Iceland
14. C.L. Vincent, G. Giebel, **P. Pinson** (2009). Characterisation of wind variability at the Horns Rev wind farm. EWEC'09, European Wind Energy Conference, Scientific Track, Marseille, France
15. **P. Pinson**, G. Papaefthymiou, B. Klöckl, J. Verboomen (2009). Dynamic sizing of energy storage for hedging wind power forecast uncertainty. IEEE Power Engineering Society General Meeting 2009, Calgary, Canada
16. B. Klöckl, **P. Pinson** (2009). Effects of increasing wind power penetration on the physical operation of large electricity market systems. IEEE/CIGRE symposium 2009, Calgary, Canada
17. J. Tastu, **P. Pinson**, H. Madsen (2010). Multivariate conditional parametric models for the spatio-temporal analysis of wind power forecast errors. EWEC'10, European Wind Energy Conference, Scientific Track, Varsaw, Poland
18. S. Alessandrini, **P. Pinson**, R. Hagedorn, G. Decimi, S. Sperati (2010). An application of ensemble/multi model approach for wind power production forecasting. 10th EMS Conference, European Meteorological Society, Zurich, Switzerland
19. **P. Pinson** (2011). Ensemble and probabilistic forecasting of (u, v)-wind for the energy application. 11th EMS Annual Meeting and 10th European Conference on Applied Meteorology (ECAM), Berlin, Germany *(invited)*
20. S. Alessandrini, **P. Pinson**, S. Sperati, G. Decimi (2011). The influence of the new ECMWF Ensemble Prediction System resolution on wind power forecast accuracy and uncertainty estimation. 11th EMS Annual Meeting and 10th European Conference on Applied Meteorology (ECAM), Berlin, Germany
21. A. Bossavy, R. Girard, N. Siebert, **P. Pinson**, G. Kariniotakis (2011). Forecasting uncertainty around the timing of large variation of wind power. 11th EMS Annual Meeting and 10th European Conference on Applied Meteorology (ECAM), Berlin, Germany *(Outstanding Poster Award)*

22. P.-J. Trombe, **P. Pinson**, H. Madsen, N.E. Jensen, L.B. Pedersen, A. Sommer, N.F. Le (2011). Can weather radars help monitoring and forecasting wind power fluctuations at large offshore wind farms? 10th International Workshop on Large-Scale Integration of Wind Power and Transmission Networks, Aarhus, Denmark

23. **P. Pinson**, T. Jónsson, M. Zugno, J.M. Morales, H. Madsen, B. Klöckl (2012). Statistical analysis of the impact of wind power on market quantities and power flows. IEEE Power Engineering Society General Meeting 2012, San Diego, California, US *(invited)*

24. J. Tastu, **P. Pinson**, H. Madsen (2012). Spatio-temporal correction of wind power probabilistic forecasts. 11th International Workshop on Large-Scale Integration of Wind Power and Transmission Networks, Lisbon, Portugal

25. S. Alessandrini, S. Sperati, C. Diego, A. Pitto, **P. Pinson** (2012). An application and verification of ensemble forecasting of wind power to calculate operational risk indices for power grids. 11th International Workshop on Large-Scale Integration of Wind Power and Transmission Networks, Lisbon, Portugal

26. B. Barahona, P.-J. Trombe, N.A. Cutululis, **P. Pinson** (2013). Regime-based control to reduce power fluctuations from offshore wind power plants. IEEE PowerTech Conference 2013, Grenoble, France

27. S. Delikaraoglou, K. Heussen, **P. Pinson** (2014). Operational strategies for activation of control reserves in view of stochastic generation. PSCC 2014, Wroclaw, Poland

28. S. Delikaraoglou, **P. Pinson**, R. Eriksson, T. Weckesser (2015) Optimal dynamic capacity allocation of HVDC interconnections for cross-border exchange of balancing services in presence of uncertainty. CIGRE Symposium "Across-borders HVDC systems and electricity markets", Lund, Sweden

29. S. Delikaraoglou, A. Papakonstantinou, C. Ordoudis, **P. Pinson** (2015). Price-maker wind power producer participating in a joint day-ahead and real-time market. 12th IEEE International Conference European Energy Market, Lisbon, Portugal

30. E.M. Larsen, **P. Pinson**, G. Le Ray, G. Giannopoulos (2015). Demonstration of market-based real-time electricity pricing on a congested feeder. 12th IEEE International Conference European Energy Market, Lisbon, Portugal

31. C. Ordoudis, M. Zugno, **P. Pinson**, J.M. Morales (2015). Stochastic unit commitment via progressive hedging - Extensive analysis of solution methods. IEEE PowerTech Conference 2015, Eindhoven, The Netherlands

32. W.A. Bukhsh, A. Papakonstantinou, **P. Pinson** (2016). A robust optimisation approach using CVaR for unit commitment in a market with probabilistic offers. IEEE International Energy Conference 2016 (EnergyCon), Leuven, Belgium

33. C. Ordoudis, **P. Pinson** (2016). Impact of renewable energy forecast imperfections on market-clearing outcomes. IEEE International Energy Conference 2016 (EnergyCon), Leuven, Belgium.

34. E. Mocanu, H. Phuong Nguyen, M. Gibescu, E.M. Larsen, **P. Pinson** (2016). Demand forecasting at low aggregation levels using factored conditional restricted Boltzmann machine. 19th Power Systems Computation Conference (PSCC), Genoa, Italy

35. J. Kazempour, **P. Pinson** (2016). Effects of risk aversion on market outcomes: A stochastic two-stage equilibrium model. IEEE Probabilistic Methods Applied to Power Systems (PMAPS) 2016, Beijing, China

36. **P. Pinson** (2016). Introducing distributed learning approaches in wind power forecasting. IEEE Probabilistic Methods Applied to Power Systems (PMAPS) 2016, Beijing, China

37. L. Mitridati, **P. Pinson** (2016). Optimal coupling of heat and electricity systems: A stochastic hierarchical approach. IEEE Probabilistic Methods Applied to Power Systems (PMAPS) 2016, Beijing, China

38. A. Papakonstantinou, **P. Pinson** (2016). Population dynamics for renewables in electricity markets: A minority game view. IEEE Probabilistic Methods Applied to Power Systems (PMAPS) 2016, Beijing, China

39. N. Mazzi, **P. Pinson** (2016). Purely data-driven approaches to trading of renewable energy generation. European Electricity Market Conference (EEM) 2016, Porto, Portugal

40. E.B. Iversen, I. Arduin, **P. Pinson** (2016). RESGen: Renewable Energy Scenario Generation platform. IEEE PES General Meeting, Boston (MA), USA

41. L. Exizidis, J. Kazempour, **P. Pinson**, Z. de Greve, F. Vallee (2016). Strategic wind power trading considering rival wind power production. IEEE PES Innovative Smart Grid Technologies (ISGT) – Asia, Melbourne, Australia

42. C. Ordoudis, S. Delikaraoglou, **P. Pinson**, J. Kazempour (2017). Exploiting flexibility of coupled electricity and natural gas markets: A price-based approach. IEEE PowerTech 2017 Conference, Manchester, UK

43. L. Halilbasic, S. Chatzivasileiadis, **P. Pinson** (2017). Coordinating flexibility under uncertainty in multi-area AC and DC grids. IEEE PowerTech Conference 2017, Manchester, UK

44. N. Vespermann, S. Delikaraoglou, **P. Pinson** (2017). Offering strategy of a price-maker energy storage system in day-ahead and balancing markets. IEEE PowerTech Conference 2017, Manchester, UK

45. F. Thams, L. Halilbasic, **P. Pinson**, S. Chatzivasileiadis, R. Eriksson (2017). Data-driven security-constrained OPF. IREP Conference 2017, Porto, Portugal

46. F. Moret, T. Baroche, E. Sorin, **P. Pinson** (2018). Negotiation algorithms for peer-to-peer electricity markets: Computational properties. PSCC Conference 2018, Dublin, Ireland

47. L. Bobo, S. Delikaraoglou, N. Vespermann, J. Kazempour, **P. Pinson** (2018). Offering strategy of an aggregator in a flexibility balancing market using asymmetric block offers. PSCC Conference 2018, Dublin, Ireland

48. L. Halilbasic, F. Thams, A. Venzke, S. Chatzivasileiadis, **P. Pinson** (2018). Data-driven security-constrained AC-OPF for operations and markets. PSCC Conference 2018, Dublin, Ireland
49. G. Le Ray, M. H. Christensen, **P. Pinson** (2019). Detection and characterization of domestic heat pumps. IEEE PowerTech Conference, Milano, Italy
50. M. H. Christensen, **P. Pinson**(2019). Data-driven learning from dynamic pricing data – Classification and forecasting. IEEE PowerTech Conference, Milano, Italy
51. A. Schwele, C. Ordoudis, J Kazempour, **P. Pinson** (2019). Coordination of power and natural gas systems: Convexification approaches for linepack modeling. IEEE PowerTech Conference, Milano, Italy
52. C. Kok, J. Kazempour, **P. Pinson** (2019). A DSO-Level contract market for conditional demand response. IEEE PowerTech Conference, Milano, Italy
53. A. M. Radoszynski, V. Dvorkin, **P. Pinson** (2019). Accommodating bounded rationality in pricing demand response. IEEE PowerTech Conference, Milano, Italy
54. T. Baroche, F. Moret, **P. Pinson** (2019). Prosumer markets: A unified formulation. IEEE PowerTech Conference, Milano, Italy

Book Chapters

1. **P. Pinson**, G. Giebel, N.-E. Clausen (2013). Onshore and offshore wind energy. In: R. Pielke, G. Kallos (eds.), *Reference Module in Earth Systems and Environmental Sciences* (Elsevier), from *Climate Vulnerability*, pp. 53-64
2. **P. Pinson**, P. McSharry, R. Girard (2013). Stochastic power generation. In: H.H. Larsen and L.S. Petersen (eds.), *DTU International Energy Report 2013: Energy storage options for future sustainable energy systems*, pp. 24-28
3. J. Tastu, **P. Pinson**, H. Madsen (2015). Space-time trajectories of wind power generation: Parametrized precision matrices under a Gaussian copula approach. *Lecture Notes in Statistics: Modeling and Stochastic Learning for Forecasting in High Dimension*, Springer, pp. 267-296
4. R. Bessa, J. Dowell, **P. Pinson** (2015). Renewable energy forecasting. *Smart Grid Handbook*, Wiley, pp. 1-21
5. N. Mazzi, **P. Pinson** (2017). Wind power in electricity markets and the value of forecasting. *Renewable Energy Forecasting - From Models to Applications*, Elsevier, pp. 259-278
6. **P. Pinson**, J. Messner (2017). Application of post-processing for renewable energy. *Statistical Processing of Ensemble forecasts*, Elsevier
7. **P. Pinson**, F. Moret, T. Baroche, A. Papakonstantinou (2020). Negotiation approaches for sharing systems - From pool-based to peer-to-peer. *Control and Optimization Analytics for the Sharing Economy - New Opportunities for Engineers and Mathematicians* , Springer

Broader Readership

1. **P. Pinson**, G. Giebel, H. Madsen (2008). Forecasting of wind generation - The wind power of tomorrow on your screen today! *WindTech International* 4(8), pp. 32-35
2. T.I. Petroliagis, **P. Pinson** (2012). Early indication of extreme winds utilising the Extreme Forecast Index. *ECMWF Newsletter* 132, pp. 13-19
3. **P. Pinson**, H. Madsen (2013). Forecasting the conditional dynamic elasticity of electricity consumers. *ERCIM News* 92, pp. 11
4. **P. Pinson** (2013). Prévoir l'électricité produite par nos énergies renouvelables (in French). Mathematics for Planet Earth (Mathématiques de la planète Terre), "Un jour, une brève", `mpt2013.fr`
5. **P. Pinson** (2013). Rendre la consommation d'électricité plus flexible et controlable (in French). Mathematics for Planet Earth (Mathématiques de la planète Terre), "Un jour, une brève", `mpt2013.fr`
6. S. Cros, **P. Pinson** (2018). Le défi météorologique des énergies solaire et éolienne pour les énergies renouvelables. *La Revue des Mines*
7. **P. Pinson** (2022). To share or not to share – the future of collaborative forecasting. *Foresight*

Ph.D. Students

➤ Thomas Falconer: *Data markets for energy analytics* (2022-...)

➤ Elea Prat: *Multi-scale decision-making and applications to energy systems* (2022-...)

➤ George Vassos: *Estimation of optimal dynamic purchasing policies in procurement under contract compliance constraints* (2021-...)

➤ Amandine Pierrot: *Renewable energy forecasting* (2020-...)

➤ Benedikt Sommer (with K. Holst): *High-dimensional time series forecasting for empty container repositioning problems* (2019-...)

➤ Linde Frölke: *Market design for future district heating systems* (2023)

➤ Ilgiz Murzakhanov (with S. Chatzivasileiadis): *Data-driven approaches for power grids* (2023)

➤ Anubhav Ratha (with J. Kazempour and A. Virag): *Market mechanisms for integrated energy system management* (2022)

➤ Andrea Tosatto (with S. Chatzivasileiadis): *Optimization and market integration of multi-area AC/HVDC grids under uncertainty* (2021)

➤ Vladimir Dvorkin (with J. Kazempour): *Advanced game-theoretical problems in future electricity markets* (2021)

➤ Anna Schwele (with J. Kazempour): *Market mechanisms for integrated energy system management* (2020)

➤ Andreas Venzke (with S. Chatzivasileiadis): *Optimization, operation and control for AC-DC grids* (2020)

➤ Thomas Baroche (with ENS Rennes): *Peer-to-peer and community-driven electricity markets: grid costs and operations* (2020)

➤ Fabio Moret (with Thanasis Papakonstantinou): *Peer-to-peer and community-driven electricity markets: market design and operations* (2020)

➤ Morten H. Christensen: *Predicting and mobilizing energy flexibility in intelligent buildings* (2020)

➤ Lejla Halilbasic (with S. Chatzivasileiadis): *Impact of HVDC on the European power system* (2019)

➤ Guillaume Le Ray (with O. Winther): *Profiling and detection problems with dynamic smart metering data streams* (2019)

➤ Lesia Mitridati (with J. Kazempour): *Market-based approaches to the coordination of heat and electricity systems* (2019)

➤ Christos Ordoudis (with J. Kazempour and J.M. Morales): *Market-based approaches to the coordination of gas and electricity systems* (2018)

➤ Nicolò Mazzi: *Optimal offering and operating strategies in electricity markets* (2017)

➤ Tue V. Jensen: *Systemic aspects of highly renewable energy markets* (2017)

➤ Amanda Lenzi (with B. Ersbøll): *Statistical modelling of space-time processes with applications in meteorological and renewable energy forecasting* (2017)

➤ Tiago Soares (with H. Morais): *Energy and ancillary services in future electricity markets* (2017)

➤ Stefanos Delikaraoglou (with K. Heussen and J.M. Morales): *Modelling of market-based cross-border exchange of balancing power* (2016)

➤ Zied Ben Bouallègue (with A. Henze): *Calibration and verification of probabilistic meteorological forecasts for energy-related applications* (2016)

➤ Ditte Mølgård Heide-Jørgensen (with T. Boomsma and N. Detlefsen): *Intra hour model for the power market in systems with high wind penetration* (2016)

➤ Qi Wang (with J.M. Morales, S. Pineda and Peter Meibom): *System-wide socio-economic and reliability impact of active management of distribution grids and distributed energy resources* (2016)

➤ Niamh O'Connell (with H. Madsen and M. O'Malley): *Stochastic dynamics of demand response and the impact on power systems service provision* (2016)

➤ Chunyu Zhang: *Market design and network planning for distribution grid* (2015)

➤ Emil Mahler Larsen (with Y. Ding and J. Østergaard): *Electricity market design for distributed energy resources and flexible demand* (2015)

➤ Julija Tastu (with H. Madsen): *Short-term wind power forecasting: probabilistic and space-time aspects* (2013)

➤ Marco Zugno (with H. Madsen and J.M. Morales): *Optimization under uncertainty for management of renewables in electricity markets* (2013)

➤ Pierre-Julien Trombe (with H. Madsen): *Modelling and forecasting of wind power generation – Regime-switching approaches* (2013)

➤ Tryggvi Jónsson (with N.K. Poulsen): *Forecasting and decision-making in electricity markets with focus on wind energy* (2012)

➤ Claire L. Vincent (with G. Giebel and A. Hahmann): *Predictability of wind fluctuations at large offshore wind farms* (2011)