Pierre Pinson

CONTACT INFORMATION
Hellebækvej 33A
3000 Helsingør
Denmark

tel: +45 4525 3541
e-mail: ppin@dtu.dk
www: http://pierrepinson.com

PERSONAL
French (D.O.B. 28th of March 1980, Poitiers, France)
Married to Maria Fønss Lazzaro - Father of 2 boys: Samuel Isaïah and Ezra Louis

RESEARCH INTERESTS
Mathematical modeling, (probabilistic) Forecasting, Operations research, Stochastic optimization, Decision-making under uncertainty, (algorithmic) Game theory, Meteorology, Electricity markets

APPOINTMENTS

Technical University of Denmark, Electrical Engineering, Kgs. Lyngby, Denmark

Professor **03/2013 – ...**

- Heading a group focusing on Energy Analytics & Markets
- Research combining stochastic process modelling and forecasting, operations research, energy economics and game theory with application to energy systems
- Principal Investigator for a number of Danish projects (e.g. The Energy Collective, '5s' - Future Electricity Markets) as well as international projects (mainly EU, US, China)
- Teaching and supervision at B.Sc., M.Sc. and Ph.D. levels

Technical University of Denmark, Applied Mathematics, Kgs. Lyngby, Denmark

Associate Professor **03/2008 – 03/2013**

- Research combining mathematical modelling, forecasting, operations research, stochastic optimization and game theory, mainly for energy-related applications
- Work Package leader in various European projects and Coordination Actions
- Coordinator and/or principal investigator in a number of Danish projects
- Supervision of B.Sc., M.Sc. and Ph.D. students, as well as occasional teaching

On leave - Scientist at ECMWF, Reading, United Kingdom **03/2010 – 03/2011**
(ECMWF: European Centre for Medium-range Weather Forecasts)

- Research on ensemble forecasting, online learning and probabilistic forecast verification
- Main focus on the wind and wave variables, and energy applications

Post-doc, Assistant Professor **04/2006 – 02/2008**

- Research on mathematical modelling methods for forecasting and optimization of electric and heat energy systems

Ecole des Mines de Paris, Center for Energy and Processes, Sophia-Antipolis, France

Research/Project Engineer **09/2002 – 03/2006**

- French and European projects on wind power forecasting and renewable energy management
- Lecturing on wind power forecasting for M.Sc. students at Ecole des Mines de Paris

EDUCATION

Ecole des Mines de Paris, Paris, France

Ph.D., Energetics (03/2006)
with highest honours, a European label, and shortlisted for the ParisTech award 2007

- Title: *Estimation of the uncertainty in wind power forecasting*
- Jury: Pr. A. Zervos (president), Pr. H. Madsen, Pr. V. Miranda, Dr. F. Atger, Dr. E. Brière, Dr. G. Kariniotakis (advisor)
- Guest researcher at Technical University of Denmark (2005)

Institut National des Sciences Appliquées, Toulouse, France

M.Sc., Applied Mathematics (09/2002)

- Specialization in Numerical Analysis, Optimization, PDEs, Probability and Statistics, Fluid Mechanics, Space applications
- Partly abroad: University of Leicester (UK) and TU Delft (The Netherlands)

VISITING POSITIONS

Isaac Newton Institute, Cambridge, UK (January-March 2019)
Ecole Normale Supérieure, Rennes, France (June 2016)
University of Washington, Department of Statistics, Seattle, USA (April-May 2009)
University of Oxford, Mathematical Institute, Oxford, UK (January 2009)

LANGUAGES

French: Mother tongue
English: Fluent
Danish: Full professional working proficiency

Travels: Europe, Iceland, United States, Canada, West Indies, Morroco, Mali, Madagascar, Ecuador, Brazil, Hong Kong, China, Australia, etc.

Teaching

Regular activities

2015-...: Leader of the study line "Electric Energy Systems" of the M.Sc. in Sustainable Energy (DTU)
2016-...: DTU course - "31765 - Optimization in modern power systems" (M.Sc./Ph.D.)
2014-...: DTU course - "31761 - Renewables in electricity markets" (M.Sc.)
2016-2017: DTU course - "31xxx - Game theory in electricity markets" (M.Sc./Ph.D.)
2016-...: DTU course - "31xxx - Decomposition techniques for solving large-scale energy system optimization problems" (M.Sc./Ph.D.)
2011-...: Coordinator of regular Energy Analytics & Markets seminars

Ex. Ad-hoc activities

2017: YEQT Winter School - "Renewable energy forecasting"
2017: DTU Summer School - "Uncertainty: origins, modeling and forecasting"
2016: DTU Summer School - "Challenges in modern power systems and electricity markets"
2015: EuroTech PhD Winter School (EPFL) - "Renewable energy forecasting"
2014: WIRE Summer School - "Renewables in electricity markets (in less than 4 hours)"
2013-: DTU courses - "Probabilistic forecasting for solar power generation", "Electricity market analytics", "Scandinavian power market modelling", "Foundamentals of wind power forecasting", "Advanced nonlinear statistical modelling with application to energy systems", "Pricing electric demand response", etc.
2013: WIRE Summer School - "Uncertainty of renewable energy forecasts"
2010: ECMWF training course - "Wind power forecasting and electricity markets"

Service

Editorial membership

2018-...: International Journal of Forecasting - Editor-in-Chief
2018-2019: International Journal of Forecasting - (handling) Editor
2014-2018: International Journal of Forecasting - Associate Editor
2013-2016: IEEE Power Engineering Letters - (ad hoc) Editor
2011-2016: IEEE Transactions on Power Systems - Editor
2010-2019: Wind Energy - Editor

2016: International Journal of Forecasting - Guest Editor: "Probabilistic energy forecasting"
2015: IEEE Transactions on Power systems - Guest Editor: "Wind & solar energy: uncovering and accommodating their impact on electricity markets"
2014: IEEE Transactions on Smart Grid - Guest Editor: "Analytics for energy forecasting with application to smart grid"

Journal referee

ACM Computing Surveys, Annals of Applied Statistics, Applied Energy, Automation in Construction, Climate Dynamics, Computer and Mathematics with Applications, Energy, Energy Conversion and Management, Energy Economics, Energy Policy, Energy Science & Engineering, European Journal of Operational Research, Geophysical Research Letters, Hydrology and Earth System Sciences, IEEE Journal of Selected Topics in Earth Observations and Remote Sensing, IEEE Transactions on Geoscience and Remote Sensing, IEEE Transactions on Power Systems, IEEE Transactions on Smart Grid, IEEE Transactions on Sustainable Energy, IET Generation, Transmission & Distribution, International Journal of Forecasting, Journal of Applied Meteorology and Climatology, Journal of Applied Statistics, Journal of Climate, Journal of Computational and Graphical Statistics, Journal of Geophysical Research - Atmospheres, Journal of Renewable and Sustainable Energy, Journal of Wind Engineering and Industrial Aerodynamics, Meteorological Applications, Monthly Weather Review, Quarterly Journal of the Royal Meteorological Society, Renewable Energy, Resources, Solar Energy, Sustainable Energy, Grids & Networks, Technometrics, Tellus A, TEST, Weather and Forecasting, Wiley Encyclopedia of Electrical and Electronics Engineering, Wind Energy

Reviewer for book proposals

IET, John Wiley & Sons, Springer

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.

Committee for academic evaluation and recruiting

Masdar Institute of Technology, Aarhus University, Colorado School of Mines, University of Michigan, University College London, Mines ParisTech, Chinese University of Hong Kong, Tallinn University of Technology, UiT (Norway), Tafila Technical University (Jordan)

Conferences (Scientific/Programme Committee/Reviewer)

PSCC 2020, IEEE PowerTech 2019, PSCC 2018, IEEE PowerTech 2017, PSCC 2016, IEEE PowerTech 2015, ACC 2015, European Offshore Wind 2015, DARE 2014, Torque 2014, IEEE PMAPS 2014,

PSCC 2014, EnergyCon 2014, ACM e-Energy 2014, IEEE SmartGridComm 2013, IEEE ISGT 2013, EWEA Annual Event 2013, IASTED EuroPES 2012, MixGenera 2011, Marcus Evans - Strategic Weather Risk Management for the Energy Industry 2011, IEEE PMAPS 2008

Other

2014: Global Energy Forecasting competition (GEFCom2014 – hosted by crowdanalytix.com, app. 600 participating teams): Vice-chair, responsible for the wind energy track (2014)
2012: Global Energy Forecasting competition (GEFCom2012 – hosted by kaggle.com, app. 200 participating teams): Vice-chair, responsible for the wind energy track (2012)

Membership

INFORMS (Analytics & Optimization Societies, ENRE Section)
IIF (International Institute of Forecasters)
IEEE, Senior Member (Power & Energy Society)

Impact

Citations

ISI Web of knowledge	∼4150 (h-index = 36)
Scopus	∼5200 (h-index = 38)
Google Scholar	∼10100 (h-index = 52)

Web, downloads and hits

DTU orbit	>20.000 downloads (publication database of the Technical University of Denmark)
pierrepinson.com	>500 unique visitors per month

Awards

Simons Fellowship, Isaac Newton Institute, Cambridge, UK, 2019
IDA Elektropris, 2018
Best Poster Award, Society for Risk Analysis conference 2017 (FA: K. Schell)
Emerald Citation of Excellence, 2017, for highly cited paper in Business and Economics
Numerous highly-cited papers (8 in ISI web of knowledge, top 1% citations in their field)
Nominated as DTU Teacher of the Year (2017, 2018)
Nominated by DTU for the EliteForsk Award (2015, 2016, 2017)
Best teacher award, DTU Elektro, Spring 2016 (based on student evaluations)
IEEE PES Award 2015 (PSPI Working Group Recognition Award) for Tutorials on Energy Forecasting (with Tao Hong, Shu Fan and Hamidreza Zareipour)
Outstanding Reviewer Award, IEEE Transactions on Sustainable Energy, 2014
ERC Consolidator Grant application given a grade A (though not funded due to limited budget), 2014
Recharge4040: on the list of the 40 world foremost new energy pioneers under 40, 2014
Nominated as one of the best Ph.D. supervisors at DTU, 2013
Senior Member, IEEE, 2013
INFORMS 2012: nominated for INFORMS Energy and Natural Resources best paper award 2012 (paper: Giabardo *et al* (2010) in Energy Economics)
EWEA Annual Event 2012: Best poster award (FA: P.-J. Trombe)
EMS/ECAM 2011: Outstanding poster award (FA: A. Bossavy)
EMS (European Meteorological Society) Young Scientist Travel Award 2011

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

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 (2019). 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*

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*, available online
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. Valle (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 Mététorologie* 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). Guest editorial: 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. Schwele, J. Kazempour, **P. Pinson** (2019). Do unit commitment constraints affect generation expansion planning? A scalable stochastic model. *Energy Systems*, available online
123. A. Papakonstantinou, G. Champeri, S. Delikaraoglou, **P. Pinson**, (2019). Optimal trading strategies for stochastic producers participating in financial and electricity markets. *Wind Energy*, available online
124. C. Ziras, J. Kazempour, E.C. Kara, H.W. Bindner, **P. Pinson**, S. Kiliccote (2019). A mid-term DSO market for capacity limits: How to estimate opportunity costs of aggregators? *IEEE Transactions on Smart Grid*, available online

Submitted & Working Papers

125. C. Ordoudis, S. Delikaraoglou, J. Kazempour, **P. Pinson** (2019). Market-based coordination for integrated electricity and natural gas systems under uncertain supply
126. L. Mitridati, J. Kazempour, **P. Pinson** (2019). Heat and electricity market coordination: A scalable complementarity approach
127. C. Ordoudis, V.A. Nguyen, D. Kuhn, **P. Pinson** (2019). Energy and reserve dispatch with distributionally robust joint chance constraints
128. D. Thomas, J. Kazempour, A. Papakonstantinou, **P. Pinson**, O. Deblecker, C.S. Ioakimidis (2019). A local market mechanism for physical storage rights
129. G. Le Ray, **P. Pinson** (2019). The ethical smart grid: Enabling a fruitful and long-lasting relationship between utilities and electricity consumers
130. B. Sommer, **P. Pinson**, J.W. Messner, D. Obst (2019). Online distributed learning in wind power forecasting
131. L. Mitridati, J. Kazempour, **P. Pinson** (2019). Community-based multi-carrier flexibility: A game-theoretical approach
132. L. Bobo, L. Mitridati, J. Kazempour, J. Taylor, **P. Pinson** (2019). Price-region bids in forward electricity markets
133. C. Gilbert, J.W. Messner, **P. Pinson**, P.-J. Trombe, R. Verzijlbergh, P. van Dorp, H. Jonker (2019). Statistical post-processing of turbulence-resolving weather forecasts for offshore wind power forecasting
134. P. Winker, G. Le Ray, **P. Pinson** (2019). Unsupervised energy disaggregation: From sparse signal approximation to community detection
135. P. Lauret, M. David, **P. Pinson** (2019). Verification of solar irradiance probabilistic forecasts
136. J. W. Messner, **P. Pinson**, J. Browell, M. B. Bjerregård, I. Schicker (2019). Evaluation of wind power forecasts – An up-to-date view
137. C. Goncalves, R. Bessa, **P. Pinson** (2019). A critical overview of privacy-preserving learning in Vector Autoregressive models in energy forecasting

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

Other Conference Publications

not listed (> 50)

Invited/Keynote Talks (selection)

- Recent problems in renewable energy forecasting: towards high-dimensional problems. University of East Anglia, March 2019
- Show me your forecast, I will show you mine! Are we going towards energy data markets? University of Waterloo, October 2018
- Community and peer-to-peer electricity markets. UCD, Ireland, September 2018
- Community and peer-to-peer electricity markets. MIT, USA, April 2018
- Community and peer-to-peer electricity markets. University of Oxford, UK, November 2017
- Wind power forecasting: Nonlinearity, dimensionality and sharing aspects. ISF 2017, Cairns, Australia
- High-dimensional modelling and forecasting for wind power generation. Monash University, June 2017
- Post-processing of ensemble forecasts for renewable energy applications. Meteo-France, May 2017

- Prosumer-centric electricity markets - Is that where digitization is taking us? UVIG US-Denmark workshop, May 2017
- Renewables in electricity markets - Coordination and offering problems. Institut Henri Poincaré, April 2017
- Show me your forecast, I will show you mine! Are we going towards energy data markets? EDF, April 2017
- Prosumer-centric electricity markets - Energy collectives and peer-to-peer exchanges. ETH Zurich, April 2017
- Towards future electricity markets with large penetration of renewable generation. ETH Zurich, October 2015
- Towards future electricity markets with large penetration of renewable generation. TU Eindhoven, May 2015
- Modelling of high-dimensional space-time dynamics of renewables. Universite Paris 7, January 2015
- Towards the usage of new large datasets for renewable energy applications. University of Bonn, December 2014
- Offshore wind power fluctuations - Modelling and forecasting. Tsinghua University, October 2014
- Stochastic renewable energy generation in electricity markets - Forecasting and optimization challenges. University of Hong Kong, October 2014
- The value of probabilistic information for energy applications - from theory to reality. German Weather Service (DWD), October 2013
- Future electricity markets dominated by stochastic drivers. IEEE ISGT 2013, DTU
- Discrimination ability of the Energy score(s). University of Heidelberg, October 2013
- Renewable energy forecasts ought to be probabilistic! WIPFOR - Forecasting for the energy industry, Paris, June 2013
- Stochastic power generation from renewables: forecasting and optimization challenges for its optimal integration. Energy Systems Week, Cambridge (UK), April 2013
- Probability forecasting for energy: minutes to months. National meeting of the Royal Meteorological Society, Imperial College, London, UK, October 2012
- Wind power in markets and power systems: the contribution of meteorology? Seminar Series, University of Reading, Department of Meteorology, October 2012
- Integration of wind and solar energy through joint prediction. TRES project workshop, Las Palmas, Spain, September 2012
- The most promising sources: wind, solar, waves. Marcus Evans - Strategic Weather Risk Management for the Energy Industry, Amsterdam, May 2011
- Point, probabilistic or scenario forecasts of wind power generation? Seminar Series, University of Castilla La Mancha, November 2010
- Probabilistic forecasting of wind power generation: the points of view of forecasters and of forecast users. University of Washington, April 2009
- Regime-switching dynamics and nonstationarity of wind speed/power time-series. Texas A&M, April 2009
- Dynamics of a market significantly penetrated by wind power. Vinddag 2008, November 2008.
- Selected topics related to wind power modeling, forecasting and decision-making - Nonlinearity and nonstationarity. Lund University, November 2008
- Uncertainty: how to quantify it... and how to use it. in Workshop: 'Best practice in the use of short-term forecasting of wind power', Delft, October 2006

Projects & Funding

European level

- **EMBER** (PI, 2019-2022): Proposal and analysis of consumer-centric markets for heat (and electricity).
- **Best Paths** (PI, 2014-2018): Scalability and benefit assessment of HVDC system deployment over Europe.
- **Ecogrid EU** (PI, 2013-2015): Market concepts proposal and evaluation for the optimal management of demand response.
- **TWENTIES** (PI, 2012-2013): Probablistic forecasting for Dynamic Line Rating.
- **WIRE** (PI, 2011-2015): Weather Intelligence for Renewable Energy - Participant in renewable energy forecasts benchmarking group, as well as dynamic line rating working group.
- **Wind in Øresund** (CI, 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** (PI, 2008-2012): Coordination of research and development efforts towards new methods for wind power forecasting accounting for spatio-temporal characteristics, regimes, etc.

- **NORSEWInD** (PI, 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** (PI, 2008-2011): Coordination of the evaluation of the benefits of wind power forecasts and associated uncertainty estimation when used in decision-making
- **POW'WOW** (PI, 2006-2009): Coordination of benchmarking and dissemination activities in the field of wind power forecasting
- **ANEMOS** (CI, 2002-2006): Research and development of methods for estimation and communication of uncertainty in wind power forecasts

Danish level (various types of grants/fundings)

- **Multi-DC** (CI, 2016-2020): Market-based operation of DC links and DC grids with application to the Scandinavian region.
- **The Energy Collective** (PI, 2016-2020): Design and demonstration of consumer centric and community-driven electricity markets based on peer-to-peer exchanges.
- **Ecogrid 2.0** (PI, 2016-2018): Market concepts proposal and evaluation for the optimal management of demand response.
- **EnergyLab Nodhavn** (PI, 2015-2018): Research and demonstration on integrated market solutions (e.g., heat and electricity) at both wholesale and retail levels.
- **CITIES** (PI, 2014-2019): Research Centre on IT-Intelligent Energy Systems - Leading work package on Intelligent Aggregation and Markets.
- **PROAIN** (PI, 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** (PI, 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** (CI, 2011-2013): Fast monitoring and verification of wind turbine and wind farm power curves
- **EaseWind** (PI, 2011-2014): Relevant forecasting products for wind turbines to provide ancillary services in order to support grid operations
- **Radar@Sea** (PI, 2009-2012): Short-term wind (power) forecasting at Horns Rev using real-time data from an onsite Local Area Weather Radar
- **Mesoscale atmospheric variability and the variation of wind and production for offshore wind farms** (PI, 2007-2010): Coordination of research and development efforts for statistical modeling and characterization of power fluctuations at offshore wind farms
- **High-resolution ensemble forecasting at Horns Rev** (PI, 2007-2009): Research and development on probabilistic forecasting of wind power production based on ensemble forecasts of meteorological variables. Application to the Horns Rev wind farm
- **Ecogrid.dk** (PI, 2007-2008): Expertise on forecasting of renewable energy production, load and electricity prices
- **CMBC (Center for Model-Based Control)** (CI, 2007-2009): Research and development on modeling strategies for the optimal management of district heating systems
- **Power fluctuations in large offshore wind farms** (CI, 2005-2008): Research and development on regime-switching modeling of such fluctuations, and description of the behaviour of power fluctuations at Horns Rev and Nysted
- **Intelligent wind power prognosis** (CI, 2004-2007): Research and development on robust methods for adaptive estimation of wind-to-power conversion models and application to forecasting
- **Better forecasting of wind power production** (CI, 2004-2007): Research and development on the evaluation of nonparametric probabilistic predictions of wind power

Industrial/Collaborative projects

- **GigaStore - Potential for solar-powered heat storage in Denmark** (PI, 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** (PI, 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** (PI, 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** (PI, 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** (PI, 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

Supervision

Post-doc researchers, and research assistants

- Corey Kok (2018-...)
- Tiago Sousa (2017-...)
- Ehsan Fallahi Sichani (2017-2018)
- Fabio Moret (2016-2017)
- Jakob Messner (2016-2017)
- Stefanos Delikaraoglou (2016-2017)
- Athanasios Papakonstantinou (2013-2017)
- Jalal Kazempour (2015-2016)
- Emil Banning Iversen (2015-2016)
- Christos Ordoudis (2014-2015)
- Guillaume Le Ray (2014-2015)
- Said Zeidan (2014-2015)
- Waqquas Bukhsh (2014)
- Yang Li (2013)
- Thomas Bjerring (2013)
- Tryggvi Jónsson (2012-2013)
- Juan Miguel Morales Gonzalez (2011-2012)
- Gianluca Dorini (2011-2012)
- Scott Otterson (2011)

Ph.D. students (graduated: 17, current: 12)

- Benedikt Sommer (with K. Holst): *High-dimensional time series forecasting for empty container repositioning problems* (2019-...)
- Anubhav Ratha (with J. Kazempour and A. Virag): *Market mechanisms for integrated energy system management* (2018-...)
- Andrea Tosatto (with S. Chatzivasileiadis): *Optimization and market integration of multi-area AC/HVDC grids under uncertainty* (2018-...)
- Anna Schwele (with J. Kazempour): *Market mechanisms for integrated energy system management* (2017-...)
- Andreas Venzke (with S. Chatzivasileiadis): *Optimization, operation and control for AC-DC grids* (2017-...)
- Vladimir Dvorkin (with J. Kazempour): *Advanced game-theoretical problems in future electricity markets* (2017-...)
- Thomas Baroche (with ENS Rennes): *Peer-to-peer and community-driven electricity markets: grid costs and operations* (2017-...)
- Fabio Moret (with Thanasis Papakonstantinou): *Peer-to-peer and community-driven electricity markets: market design and operations* (2017-...)
- Morten H. Christensen: *Predicting and mobilizing energy flexibility in intelligent buildings* (2016-...)
- 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)

Ph.D. guests (21)
- Carla Goncalves (INESC Porto): *Privacy in distributed forecasting and data markets* (2019)
- Li Bai (Uni. Pisa): *Forecast reconciliation problems in wind power forecasting* (2018)
- Ciaran Gilbert (Uni. Strathclyde): *Very high-resolution forecasting offshore and forecast reconciliation* (2018)
- Iris van Beuzekom (TU Eindhoven): *Planning problems for multi-energy systems* (2016)
- Bruno Schyska (University of Oldenburg): *Parametrized learning approaches for renewable energy investment problems* (2016)
- Yunpeng Xiao (Xi'an Jiaotong, China): *Demand-response in electricity markets: offering and operations* (2016-2017)
- Yongning Zhao (CAS, China): *Spatio-temporal aspects in wind power forecasting* (2016-2017)
- Ayman Esmat (UC3M, Spain): *Market architerture and operations from demand-side flexibility* (2016)
- Gergo Barta (Budapest University of Technology and Economics, Hungary): *Online learning for distributed probabilistic forecasting* (2016)
- Nicolo Mazzi (Uni. Padova, Italy): *Strategic offering in the Italian electricity market* (2015)
- Victoria Guerrero Mestre (UCLM, Spain): *Stochastic unit commitment with line switching* (2015)
- Roman Le Goff Latimier (ENS Rennes, France): *Distributed and multiobjective pricing schemes for EV charging* (2015)
- Lazaros Exizidis (Uni. Mons, Belgium): *Equilibrium of strategic wind power producers in electricity markets* (2015)
- Erick Bezerra (Universidade Federal do Ceara, Brazil): *Recursive kernernel least squares approaches to very short term wind power forecasting* (2014-2015)
- Huajie Ding (Tsinghua Uni., China): *Optimal operation of distributed wind-storage systems* (2014-2015)
- Man Xu (Tsinghua Uni., China): *Robust approaches in wind power forecasting* (2014-2015)
- Jethro Dowell (Uni. Strathclyde, UK): *Spatial aspects of probabilistic wind power forecasting* (2014)
- Andrea Staid (Johns Hopkins, US): *Probabilistic maximum-value wind prediction for offshore environments* (2013)
- Can Wan (Hong Kong Polytechnic Uni., China): *Interval forecast generation and verification* (2013)
- Cristian Waimann (Uni. Buenos Aires, Argentina): *Spatial power curves and gridded wind power forecasts* (2012)
- Cristobal Gallego (UPM, Spain): *Regime-switching models for very short-term offshore wind power forecasting* (2010)

M.Sc. students (graduated: 78)
- Chiara di Modica: *Optimal forecast reconciliation with application to wind energy* (2019)
- Luca Cambiaghi: *Forecasting container shipping demand* (2019)
- Fabio Barboni: *Flexible operation of a heat booster station in Nordhavn at the interface between heat and electricity systems* (2019)
- Ario Mateucci: *Solving the scalability problem in peer-to-peer electricity markets by sparsifying communication through data analytics and machine learning* (2019)
- André Bernal: *Synergy study between a heat producing facility and a BESS at Nordhavn* (2019)
- Adélie Barré: *Trading strategies for renewable energy producers in the French electricity markets* (2018)
- Antonis Koutounidis: *Short term wind power forecasting at the European scale* (2018)
- Edoardo Bosco: *Dynamic pricing in heat and electricity markets* (2018)
- Maria Olzai: *Energy analytics and forecasting at individual households* (2018)
- Jaime Gorjon: *Optimal bidding strategy in the R2 balancing market with wind assets* (2018)
- Massimiliano Garella: *Provision of flexibility services through energy communities* (2018)
- Andrea Radoszynski: *Demand response and bounded rationality in electricity markets* (2018)
- Antoine Rosin: *Labelling events in energy systems* (2018)
- Benedikt Sommer: *Distributed learning in wind power forecasting* (2018)
- Carlos Navarro: *Forecasting services for advanced management of residential battery systems* (2018)
- Guillem Blanco: *Optimization of the operation and maintenance planning of offshore wind farms* (2018)
- Jose Granell: *Unveiling rivals' offering prices in electricity markets* (2018)
- Laura Colomer: *Market applications and feasibility of heat and electricity communities* (2018)
- Paul Frelot: *Improvement of an energy management system* (2018)
- Philipp Gunkel: *Optimized market participation of electric vehicles under uncertainties* (2018)
- Andrea Gasparella: *Peer-to-peer energy trading: a distributed optimization approach to future electricity markets* (2018)
- Pierre Winkler: *A data-driven framework for demand flexibility detection and evaluation* (2018)
- Rafael Martinez: *Cost-optimal ATCs in electricity markets* (2018)
- Alex Coronati: *Deep learning applied to forecast residual demand curve from wholesale electricity*

market (2018)
- Pablo Benavides: *Functional and Markovian switching regression approach for modelling intraday imbalance prices* (2018)
- Rehan Elahi: *Forecasting wind power generation for the European power network* (2018)
- Tommaso Orlandini: *Mutual-benefit coordination of P2P market and distribution grid management* (2018)
- Thomas Baroche: *Grid aspects in peer-to-peer and community-based electricity markets* (2017)
- Anna Schwele (with J. Kazempour): *Impact of unit commitment constraints on generation expansion decisions under wind uncertainty* (2017)
- Ignacio Candella: *System analysis of a GW scale heat storage* (2017)
- Jacobo Lansac (with J. Messner): *Regime-switching approach to improving wind power forecasts for large number of wind farms* (2017)
- Vladimir Dvorkin (with J. Kazempour): *Multi-stage strategic investment in CCGTs and wind power units via progressive hedging* (2017)
- Mirrin Snel (with T. Papakonstantinou): *Participation of pooled assets in both energy and ancillary service markets* (2017)
- Christian T. Andersen (with T. Papakonstantinou): *Evaluation of capacity market benefits in the US offshore wind market* (2017)
- Tore G. Kjeld (with J. Kazempour): *Electricity procurement strategies for a heat microgrid in Nordhavn* (2017)
- Thomas Nikolaou (with S. Delikaraoglou and C. Ordoudis): *Improving the efficiency of the gas balancing market accounting for its impact on the electricity market side* (2017)
- Pernille Yde Hansen (with T. Papkonstantinou): *Co-optimizing of energy and reserves in electricity markets with high renewable energy penetration* (2017)
- Elea Prat: *Optimization of long term hydroelectric production taking into account the uncertainty of input variables* (2017)
- Etienne Sorin: *Large scale behavior and impact of peer-to-peer electricity markets* (2017)
- Peteris Lusis: *Short-term household energy demand forecasting based on disaggregated interval metering data* (2016)
- Peter Sølvsten: *Aggregation and operation of demand response* (2016)
- Xiang Zhang (with Shi You): *Optimal synergies between electricity and heat systems* (2016)
- Alexandre d'Acremont (with Victoria Guerrero): *Scenario reduction for the unit commitment problem* (2016)
- Edoardo Simoni (with B. Elmegaard): *Analysis of a new thermal electricity storage concept* (2016)
- Fabio Moret: *Analytics of flexible electric consumption* (2016)
- Igor Arduin: *Development of an open-source platform for wind and solar probabilistic forecasting* (2016)
- Damiano Toffanin (with A. Ulbig, ETH Zurich): *Generation of customer load profiles based on smart metering time series, building-level data and aggregated measurements* (2016)
- Nicolas Gfeller (with J. Kazempour): *Market design for distribution electricity systems with microgrids* (2016)
- Alex Newcombe: *Modelling and analysis of flexible ramping products as a way to better integrate renewables into the Australian national electricity market* (2016)
- Janus Tougaard: *Participation of an electrolyser in the Danish electricity market* (2016)
- Søren Møller (with T.V. Jensen): *Revenue Adequacy and the Missing Money Problem in Highly Renewable Electricity Systems* (2016)
- Helena Perez (with J. Kazempour): *Strategic ramp offering of a flexible producer in the electricity market* (2016)
- Georgia Champeri (with S. Delikaraoglou and A. Papakonstantinou): *Trading strategy of a wind power producer in both futures and day-ahead markets* (2016)
- Alexis Gerossier: *Probabilistic forecasting short-term solar power generation with Markov-switching dynamics models* (2015)
- Said Zeidan (with U. Thygesen): *Modelling of energy-related datasets based on stochastic partial differential equations (SPDEs)* (2015)
- Lesia Mitridati (with R. Girard): *Estimation problems in unit commitment* (2015)
- Peter Funding La Cour (with B. Biegel): *Modelling and forecasting for the secondary reserve market in Germany* (2015)
- Balint Vass (with B. Biegel): *Modelling the German secondary reserve market* (2015)
- Sigurd Petersen (with A. Papakonstantinou): *Trading strategies for wind power producers in the British intraday market* (2015)
- Francesca Bona (with J.-Y. Le Boudec and N. Gast): *Pricing power variability in electricity markets* (2015)
- Mattia Baldini and Thibaut Richert (with N. Juul): *Scandinavian power market modelling* (2015)
- Richard Kfalfke (with T.V. Jensen): *ATCs and dynamic zoning in markets with high penetration of renewable energies* (2015)
- Tom Lemmens: *Using probabilistic forecasting for value optimization of wind power generation* (2014-2015)
- Rina Sari (with Lasse R. Clausen): *Modelling an integrated energy system combining excess electricity and oxyfuel power plant* (2014)
- Christos Ordoudis (with J.M. Morales and M. Zugno): *Decomposition techniques for large scale market clearing* (2014)

- Athanasios Zarogiannis (with H. Morais): *House management system for demand response participation considering weight factors* (2014)
- Marc B. Bendtsen and Finn J. Larsen (with R.H. Kristensen): *Modelling of power and energy consumption in distribution grid* (2013)
- Stephen Hall (with H. Madsen and J. Larsen): *Comparison of approaches to the unit commitment optimization under uncertainty of a co-generation energy plant* (2012-2013)
- Maxime Fortin: *Wind-wave probabilistic forecasting based on ensemble predictions* (2012)
- Stefanos Delikaraoglou (with J.M. Morales): *Optimal wind portfolio investment in view of uncertainties in power predictions and market dynamics* (2012)
- Cameron Brown (with R. Wagner and M. Courtney): *Fast verification of wind turbine power curves* (2012)
- Karsten Capion (with P. Meibom and T. Boomsma): *Charging of electric drive vehicles in a market environment* (2009)
- Philip D. Andersen (with H. Madsen): *Optimal trading strategies for a wind-storage power system under market conditions* (2008-2009)
- Marco Zugno and Paolo Giabardo (with H. Madsen): *Competitive bidding and stability analysis in electricity markets using control theory* (2008)
- Tryggvi Jónsson (with H. Madsen): *Forecasting of electricity prices accounting for wind power predictions* (2008)
- Christophe Chevallier (with G. Kariniotakis): *Optimal bidding strategies for the participation of wind energy in electricity markets* (2004)
- Nils Siebert (with G. Kariniotakis): *Development of methods for regional wind power forecasting* (2003)

B.Sc. students

- Mads Kramer: *From optimal power flow to generalized optimal power flow* (2016)
- Simon Wessel (with Lasse E. Christensen): *Decision-making under uncertainty in Nord Pool (and risk management)* (2012)
- Nicolai C. Christensen, Joachim V.V. Jensen, Andreas S. Jensenius, Jannick B. Johnsen, Matthias S.A. Larsen, Mads E. Lundt, Henrik D. Semark (with P.-J. Trombe): *A Graphical User Interface (GUI) for weather radar and wind energy data visualization and analysis* (2012)

Ph.D. Evaluation Committee

Evaluated (39):

- Alexander Herman (2019). *Electricity market design for distribution networks with flexible resources.* Technical University of Denmark, Denmark
- Manuel Perez (2019). *Distribution network planning considering capacity mechanisms and flexibility.* Luleå University of Technology, Sweden
- Bo Tranberg (2019). *Cost allocation and risk management in renewable electricity networks.* Aarhus University, Denmark
- Benjamin Donnot (2019). *Deep learning methods for predicting flows in power grids: Novel architectures and algorithms.* Paris Saclay University, France
- Ieva Linkeviciute (2019). *Essays on demand-side management in electricity markets.* Copenhagen Business School, Denmark
- Bastien Alonzo (2018). *Seasonal forecasting of wind energy ressource and production in France and associated risk.* Ecole Polytechnique, France
- James Ryan (2018). *Power production and reserve scheduling in unit commitment models.* University College Dublin, Ireland
- Romain Dupin (2018). *Prevision du Dynamic Line Rating et impact sur la gestion du systeme electrique.* Ecole des Mines de Paris, France
- Jiali Mei (2017). *Reconstitution et prédiction de séries temporelles avec la factorisation de matrice nonnégative augmentée de régression appliquée à la consommation électrique.* Université Paris-Saclay and EDF R&D, France
- Elena Mocanu (2017). *Machine learning in smart grids.* TU Eindhoven, The Netherlands
- Martin Bach-Andersen (2017). *A diagnostic and predictive framework for wind turbine drive train monitoring.* Technical University of Denmark
- Oliver Mégel (2017). *Storage in power systems: frequency control, scheduling of multiple applications, and computational complexity.* ETH Zurich, Switzerland
- Stig Ødegaard Ottesen (2017). *Techno-economic models in smart grids – Demand side flexibility optimization for bidding and scheduling problems.* National Technical Norwegian University (NTNU), Trondheim, Norway
- Zied Ben Bouallègue (2017). *Verification and post-processing of ensemble weather forecasts for renewable energy applications.* University of Bonn, Germany
- Jakob Glarbo Møller (2017). *Static security assessment and PMU data validation.* Technical University of Denmark
- Andreas Aabrandt (2017). *Dynamic coverage and flow coordination in multi-agent networks.* Technical University of Denmark
- Roman Le Goff Latimier (2016). *Gestion et dimensionnement d'une flotte de véhicules électriques associée à une centrale photovoltaïque : co-optimisation stochastique et distribuée.* Ecole Normale Supérieure, Rennes, France

- Emmanouil Bakirtzis (2016). *Short-term power system scheduling under high renewable energy penetration.* Aristotle University of Thessaloniki, Greece
- Vincent Thouvenot (2015). *Estimation et selection pour les modeles additifs et application a la prevision de la consommation.* Universite Paris-Sud 11, France
- Richard Scharff (2015). *Design of electricity market for efficient balancing of wind power generation.* KTH Stockholm, Sweden
- Martin H. Rosgaard (2015). *Limited area forecasting and statistical modelling for wind energy scheduling.* Technical University of Denmark
- Constantin Junk (2015). *Statistical methods for probabilistic wind and wind power forecasting.* Carl von Ossietzky University, Oldenburg, Germany
- Anders Thavlov (2015). *Methods for enabling utilisation of the potential flexibility in power production and consumption of entities connected in the low voltage network in a virtual power plant framework.* Technical University of Denmark
- J. Emil Banning Iversen (2015). *Probabilistic approaches to energy systems.* Technical University of Denmark
- J. Tilman G. Weckesser (2015). *On-line dynamic security assessment in power systems.* Technical University of Denmark
- Benjamin Biegel (2014). *Toward a smarter electrical grid via aggregation and control of distributed energy resources.* Aalborg University, Denmark
- Julie Bessac (2014). *Modélisation statistique des champs de vent via des modèles à variables latentes.* Université de Rennes, France
- Rolando A. Rodriguez (2014). *Weather-driven power transmission in a highly renewable European electricity network.* University of Aarhus, Denmark
- Ronay Ak (2014). *Neural Network modeling for prediction under uncertainty in energy system applications.* Ecole Centrale de Paris, France
- Fabrizio Sossan (2014). *Control of flexible demand through price signals for power system applications.* Technical University of Denmark
- Jakob W. Messner (2013). *Probabilistic forecasting of wind and wind power.* Leopold-Franzens-University Innsbruck, Austria
- Agustín Alejandro Sánchez de la Nieta López (2013). *Risk management tools for wind generators*, University of Castilla-La Mancha, Ciudad Real, Spain
- Cristóbal J. Gallego (2013). *Statistical models for very short-term wind power ramp forecasting*, Universidad Politécnica de Madrid, Madrid, Spain
- Arthur Bossavy (2012). *Characterisation and probabilistic forecasting of wind power ramp events*, Mines ParisTech, Paris, France
- Ada Lau (2011). *Probabilistic forecasting of wind power - from aggregated approach to spatio-temporal models*, University of Oxford, UK
- Juan Miguel Morales (2010). *Impact on system economics and security of a high penetration of wind power*, University of Castilla-La Mancha, Ciudad Real, Spain
- Joaquín Mur Amada (2009). *Wind power variability in the grid*, University of Zaragoza, Spain
- Kathryn Ward (2009). *Modelling the variability in wind farm output*, University of South Australia, Australia
- Hans Bludszuweit (2009). *Reduction of the uncertainty of wind power predictions using energy storage*, University of Zaragoza, Spain