Dynamical Systems - Publications - DTU Orbit (22/09/2018)

Heilmann, IT, Thygesen, UH & Sørensen, MP 2018, 'Spatio-temporal pattern formation in predator-prey systems with fitness taxis' Ecological Complexity, vol 34, pp. 44-57. DOI: 10.1016/j.ecocom.2018.04.003

Tureczek, A, Nielsen, PS & Madsen, H 2018, 'Electricity consumption clustering using smart meter data' Energies, vol 11, no. 4, 859. DOI: 10.3390/en11040859

Lex, SW, Cali, D, Koed Rasmussen, M, Bacher, P, Bachalarz, M & Madsen, H 2018, 'A cross-disciplinary path to healthy and energy efficient buildings' Technological Forecasting and Social Change. DOI: 10.1016/j.techfore.2018.07.023


De Zotti, G, Pourmousavi, SA, Madsen, H & Poulsen, NK 2018, 'Ancillary Services 4.0: A Top-To-Bottom Control-Based Approach for Solving Ancillary Services Problems in Smart Grids' IEEE Access, vol 6, pp. 11694-11706. DOI: 10.1109/ACCESS.2018.2805330

Azar, AG, Nazaripouya, H, Khaki, B, Chu, C-C, Gadh, R & Jacobsen, RH 2018, 'A Non-Cooperative Framework for Coordinating a Neighborhood of Distributed Prosumers' I E E E Transactions on Industrial Informatics. DOI: 10.1109/TII.2018.2867748


Hedlund, FH & Jarleivson Hilduberg, Ø 2018, 'Dangers of releasing CO₂ to fight fires in the cargo hold of seagoing bulk carriers' 8th International Symposium on Energy, Aberdeen, United Kingdom, 06/08/2018 - 09/08/2018,


Hansen, FT, Burns, F, Post, SL, Thygesen, UH & Jansen, T 2018, 'Length measurement methods of Atlantic mackerel (Scomber scombrus) and Atlantic horse mackerel (Trachurus trachurus) – current practice, conversion keys and recommendations' Fisheries Research, vol 205, pp. 57-64. DOI: 10.1016/j.fishres.2018.04.002


Aradóttir, TB, Boiroux, D, Bengtsson, H & Poulsen, NK 2018, Modelling of glucose-insulin dynamics from low sampled data. in Proceedings of 18th IFAC Symposium on System Identification. pp. 551-56.


Bravo Gonzalo, I, Engelscholm, RD, Sørensen, MP & Bang, O 2018, 'Polarization noise places severe constraints on coherence of all-normal dispersion femtosecond supercontinuum generation' Scientific Reports, vol 8, 6579. DOI: 10.1038/s41598-018-24691-7


De Zotti, G, Pourmousavi, SA, Madsen, H & Poulsen, NK 2018, Utilizing flexibility resources in the future power system operation: Alternative approaches. in Proceedings of 2018 IEEE International Energy Conference. IEEE. DOI: 10.1109/ENERGYCON.2018.8398773


Carni, E, Kripalan, DR, Ma, L, Kayacan, E & Ahmadiieh Khanesar, M 2017, 'An Aerial Robot for Rice Farm Quality Inspection With Type-2 Fuzzy Neural Networks Tuned by Particle Swarm Optimization-Sliding Mode Control Hybrid Algorithm' Swarm and Evolutionary Computation. DOI: 10.1016/j.swevo.2017.10.003


Hedlund, FH 2017, 'Høringssvar - Vejledning om definition større uheld 2017', 11 p..


Oland, E, Bossolini, E, Nielsen, OW, Sørensen, MP & Veje, C 2017, Modelling the thermal properties of large diameter fibre ropes. in Proceedings of the 2017 Oipeec Conference - Rope - Present and Future.


Ranjan, A, Wendt, SL, Schmidt, S, Madsbad, S, Holst, JJ, Madsen, H, Knudsen, CB, Jørgensen, JB & Nørgaard, K 2017, 'Relationship between Optimum Mini-doses of Glucagon and Insulin Levels when Treating Mild Hypoglycaemia in Patients with Type 1 Diabetes - A Simulation Study' Basic & Clinical Pharmacology & Toxicology, pp. n/a-n/a. DOI: 10.1111/bcpt.12907


Cali, D, Bachalarz, M, Bacher, P, Madsen, H, Lex, SW & Koed Rasmussen, M 2017, skoleklima.dk – A platform to monitor air quality and thermal comfort in classrooms, developed for teachers and students. in Book of Abstracts, Sustain 2017., S-4, Technical University of Denmark (DTU).


Pedersen, JW, Courdent, VAT, Vezzaro, L, Madsen, H & Mikkelsen, PS 2017, 'Urban runoff forecasting with ensemble weather predictions' 15th Nordic Wastewater Conference, Aarhus, Denmark, 10/10/2017 - 12/10/2017,


Christiansen, LE & True, H 2017, 'Warum ist es so schwierig, die lateralen Gleisstörungen durch Messungen der Fahrzeugdynamik zu bestimmen' ZEV rail, pp. 133 -139.


Sekunda, AK, Niemann, HH & Poulsen, NK 2016, Active Fault Detection Based on a Statistical Test. in Proceedings of 3rd Conference on Control and Fault-Tolerant Systems. IEEE, pp. 511-18. DOI: 10.1109/SYSTOL.2016.7739800

Kirkeby, CT, Græsbøll, K, Nielsen, SS, Christiansen, LE, Toft, N & Hisham Beshara Halasa, T 2016, 'Adaptive Test Schemes for Control of Paratuberculosis in Dairy Cows' P L o S One, vol 11, no. 12, e0167219. DOI: 10.1371/journal.pone.0167219


Rønne Rasmussen, A, Sørensen, MP, Gaididei, YB & Christiansen, PL 2016, ‘Compound waves in a higher order nonlinear model of thermoviscous fluids’ Mathematics and Computers in Simulation, vol 127, pp. 236-251. DOI: 10.1016/j.matcom.2014.01.009


Niemann, HH, Mirzaei, M, Henriksen, LC & Poulsen, NK 2016, Diagnosis of wind turbine rotor system. in Proceedings of the American Control Conference (ACC 2016). IEEE, pp. 3170-3175. DOI: 10.1109/ACC.2016.7525405
Hedlund, FH 2016, 'Kronik: Virksomheder med elitesmiley flyver under radaren' Ingenioeren, no. 27.05.2016, pp. 6.

Hedlund, FH, Selig, RS & Kragh, EK 2016, 'Large Steel Tank Fails and Rockets to Height of 30 meters - Rupture Disc Installed Incorrectly' Safety and Health at Work, vol 7, no. 2, pp. 130-137. DOI: 10.1016/j.shaw.2015.11.004


Wendt, SL, Boye Knudsen, C, Jørgensen, JB, Madsen, H & Haidar, A 2016, 'Modelling the glucose-insulin-glucagon dynamics after subcutaneous administration of native glucagon and a novel glucagon analogue in dogs' 9th International Conference on Advanced Technologies and Treatments for Diabetes (ATTD 2016), Milan, Italy, 03/02/2016 - 06/02/2016,

Wendt, SL, Boye Knudsen, C, Jørgensen, JB, Madsen, H & Haidar, A 2016, 'Modelling the glucose-insulin-glucagon dynamics after subcutaneous administration of native glucagon and a novel glucagon analogue in dogs' 9th International Conference on Advanced Technologies and Treatments for Diabetes (ATTD 2016), Milan, Italy, 03/02/2016 - 06/02/2016,


Pedersen, EB, Herbertsson, HR, Niemann, H, Poulsen, NK & Falk, AKV 2016, 'Model Predictive Control of Sewer Networks' Journal of Physics: Conference Series (Online), vol 783, 012026. DOI: 10.1088/1742-6596/783/1/012026


Baunsgaard, KMH, Ravn, O, Kallesoe, CS & Poulsen, NK 2016, MPC control of water supply networks. in Proceedings of the 15th annual European Control Conference (ECC '16). IEEE, pp. 1770-1775. DOI: 10.1109/ECC.2016.7810547


Bacher, P, de Saint-Aubain, PA, Christiansen, LE & Madsen, H 2016, 'Non-parametric method for separating domestic hot water heating spikes and space heating' Energy and Buildings, vol 130, pp. 107-112. DOI: 10.1016/j.enbuild.2016.08.037


Gaididei, Y, Rasmussen, AR, Christiansen, PL & Sørensen, MP 2016, 'Oscillating nonlinear acoustic shock waves' Evolution Equations and Control Theory (Online), vol 5, no. 3, pp. 367-381. DOI: 10.3934/eect.2016009


Sørensen, MP, Pedersen, NF & Ögren, M 2016, 'The dynamics of magnetic vortices in type II superconductors with pinning sites studied by the time dependent Ginzburg–Landau model' Physica C: Superconductivity and its Applications, vol 533, pp. 40–43. DOI: 10.1016/j.physc.2016.08.001

Bossolini, E, Nielsen, OW, Oland, E, Sørensen, MP & Veje, C 2016, 'Thermal properties of Fiber ropes' Paper presented at European Study Group with Industry, ESGI, Denmark, 01/01/2016 - 01/01/2016.

Gaairin, S, Da Ros, F, Sørensen, MP & Zibar, D 2016, Tolerance of continuous NFT spectrum to the optical fiber channel impairments. in Advanced Photonics Congress 2016., SpM3E.5, Optical Society of America (OSA). DOI: 10.1364/SPPCOM.2016.SpM3E.5


Göçmen Bozkurt, T, Giebel, G, Sørensen, PE, Réthoré, P-E, Mirzaei, M, Poulsen, NK, Skjelmose, MR & Kristoffersen, JR 2015, *Real-time available power estimation for offshore wind power plants* EWEA Offshore 2015 Conference, Copenhagen, Denmark, 10/03/2015 - 12/03/2015,


Græsbøll, K, Nielsen, SS, Toft, N & Christiansen, LE 2015, *Simulating Spread of Antimicrobial Resistant Bacteria in the Pig Pen: try our online tool* Annual Conference of The Society for Veterinary Epidemiology and Preventive Medicine, Ghent, Belgium, 25/03/2015 - 27/03/2015,

Græsbøll, K, Nielsen, SS, Toft, N & Christiansen, LE 2015, *Simulating Spread of Antimicrobial Resistant Bacteria in the Pig Pen: try our online tool* 14th Conference of the International Society for Veterinary Epidemiology and Economics, Mérida, Yucatan, Mexico, 03/11/2015 - 07/11/2015,


Halvgaard, RF, Munk-Nielsen, T, Tyshen, P, Grum, M & Madsen, H 2015, ‘Stochastic Greybox Modeling of an Alternating Activated Sludge Process’ 9th IWA Symposium on Systems Analysis and Integrated Assessment (Watermatex 2015), Gold Coast, Queensland, Australia, 14/06/2015 - 17/06/2015,

Østergaard, NB, Christiansen, LE & Dalgaard, P 2015, 'Stochastic modelling of Listeria monocytogenes single cell growth in cottage cheese with mesophilic lactic acid bacteria from aroma producing cultures' *International Journal of Food Microbiology*, vol 204, pp. 55-65. DOI: 10.1016/j.ijfoodmicro.2015.03.022


Pinson, P & Tastu, J 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, vol 5, no. 3, pp. 1019-1020. DOI: 10.1109/TSTE.2014.2323851


Castaignet, D, Barlas, TK, Buhl, T, Poulsen, NK, Wedel-Heinen, JJ, Olesen, NA, Bak, C & Kim, T 2014, 'Full-scale test of trailing edge flaps on a Vestas V27 wind turbine: active load reduction and system identification' Wind Energy, vol 17, no. 4, pp. 549–564. DOI: 10.1002/we.1589


Mirzaei, M, Soltani, M, Poulsen, NK & Niemann, HH 2014, Model based active power control of a wind turbine. in Proceedings of the American Control Conference. IEEE, pp. 5037-5042. DOI: 10.1109/ACC.2014.6859055


Löwe, R, Thorndahl, S, Mikkelsen, PS, Rasmussen, MR & Madsen, H 2014, 'Probabilistic online runoff forecasting for urban catchments using inputs from rain gauges as well as statically and dynamically adjusted weather radar' *Journal of Hydrology*, vol 512, pp. 397–407. DOI: 10.1016/j.jhydrol.2014.03.027


O'Connell, N, Madsen, H, Pinson, P, O'Malley, M & Green, T 2014, Regulating Power from Supermarket Refrigeration. in *Proceedings of the IEEE ISGT Europe 2014.*, 0414, IEEE. DOI: 10.1109/ISGTEurope.2014.7028781


Wallerek, S, Græsbøll, K & Sørensen, JB 2014, 'Retrospective community based explorative study on Cisplatin-based adjuvant chemotherapy vs. surgery only in completely resected stage IB non-small cell lung cancer (NSCLC)' 39th ESMO Congress (ESMO 2014), Madrid, Spain, 26/09/2014 - 30/09/2014,


Göçmen Bozkurt, T, Giebel, G, Poulsen, NK & Mirzaei, M 2014, 'Wind Speed Estimation and Parameterization of Wake Models for Downregulated Offshore Wind Farms' European Wind Energy Conference & Exhibition 2014, Barcelona, Spain, 10/03/2014 - 13/03/2014,

Göçmen Bozkurt, T, Giebel, G, Poulsen, NK & Mirzaei, M 2014, 'Wind Speed Estimation and Parametrization of Wake Models for Downregulated Offshore Wind Farms within the scope of PossPOW Project' Journal of Physics: Conference Series (Online), vol 524, no. 1, 012156. DOI: 10.1088/1742-6596/524/1/012156

Hansen, VL & Hjorth, PG 2013, 'Abelpris til Pierre Deligne for banebrydende matematisk rapsodi om de algebraiske ligningers geometri' Aktuel Naturvidenskab, vol 2013, no. 6, pp. 47-49.


Costanzo, GT, Gehrke, O, Bondy, DEM, Sossan, F, Bindner, HW, Parvizi, J & Madsen, H 2013, A Coordination Scheme for Distributed Model Predictive Control: Integration of Flexible DERs. in Proceedings of IEEE Innovative Smart Grid Technologies Europe 2013. IEEE. DOI: 10.1109/ISGTEurope.2013.6695474


Andersen, PHD, Rode, C & Madsen, H 2013, 'An arctic low-energy house as experimental setup for studies of heat dynamics of buildings' Frontiers of Architectural Research, vol 2, no. 4, pp. 488-499. DOI: 10.1016/j.foar.2013.08.003


Zermeno, VMR, Abrahamsen, AB, Mijatovic, N, Jensen, BB & Sørensen, MP 2013, 'Calculation of alternating current losses in stacks and coils made of second generation high temperature superconducting tapes for large scale applications' Journal of Applied Physics, vol 114, no. 17, pp. 173901. DOI: 10.1063/1.4827375

Dorini, GF, Pinson, P & Madsen, H 2013, 'Chance-constrained optimization of demand response to price signals' IEEE Transactions on Smart Grid, vol 4, no. 4, pp. 2072-2080. DOI: 10.1109/TSG.2013.2258412


Boklund, A, Hisham Beshara Halasa, T, Christiansen, LE & Enøe, C 2013, 'Comparing control strategies against foot-and-mouth disease: Will vaccination be cost-effective in Denmark?' Preventive Veterinary Medicine, vol 111, no. 3-4, pp. 206-219. DOI: 10.1016/j.prevetmed.2013.05.008


Corradi, O, Ochsenfeld, HP, Madsen, H & Pinson, P 2013, 'Controlling Electricity Consumption by Forecasting its Response to Varying Prices' I E E E Transactions on Power Systems, vol 28, no. 1, pp. 421-430. DOI: 10.1109/TPWRS.2012.2197027

Gaididei, YB, Gorria, C, Berkemer, R, Kawamoto, A, Shiga, T, Christiansen, PL, Sørensen, MP & Starke, J 2013, 'Controlling traffic jams by time modulating the safety distance' Physical Review E, vol 88, no. 4, 042803. DOI: 10.1103/PhysRevE.88.042803


Pinson, P & Tastu, J 2013, *Discrimination ability of the Energy score*. Technical University of Denmark (DTU), Kgs. Lyngby. DTU Compute-Technical Report-2013, no. 15


Wind-Willassen, Ø, Moláček, J, Harris, DM & Bush, JWM 2013, *'Exotic states of bouncing and walking droplets'*. *Physics of Fluids*, vol 25, no. 8, 082002. DOI: 10.1063/1.4817612

Bureau, E, Schilder, F, Santos, I, Thomsen, JJ & Starke, J 2013, *'Experimental bifurcation analysis of an impact oscillator - Tuning a non-invasive control scheme'*. *Journal of Sound and Vibration*, vol 332, no. 22, pp. 5883–5897. DOI: 10.1016/j.jsv.2013.05.033


Jónsson, T, Pinson, P, Nielsen, HA, Madsen, H & Nielsen, TS 2013, *'Forecasting Electricity Spot Prices Accounting for Wind Power Predictions'*. *IEEE Transactions on Sustainable Energy*, vol 4, no. 1, pp. 210-218. DOI: 10.1109/TSTE.2012.2212731

**Forecasting Production Losses at a Swedish Wind Farm**, Davis, N, Hahmann, AN, Clausen, N-E, Zagar, M & Pinson, P *Forecasting Production Losses at a Swedish Wind Farm*. Sound/Visual production (digital).


Castaignet, D, Couchman, I, Poulsen, NK, Buhl, T & Wedel-Heinen, JJ 2013, *'Frequency-Weighted Model Predictive Control of Trailing Edge Flaps on a Wind Turbine Blade'*. *IEEE Transactions on Control Systems Technology*, vol 21, no. 4, pp. 1105-1116. DOI: 10.1109/TCST.2013.2260750


Andersen, PHD, Rode, C & Madsen, H 2013, Low-energy house in Sisimiut - Data overview. Technical University of Denmark (DTU), Kgs. Lyngby. DTU Compute-Technical Report-2013, no. 18


Mirzaei, M, Soltani, M, Poulsen, NK & Niemann, HH 2013, Model Predictive Control of Wind Turbines using Uncertain LIDAR Measurements. in *2013 American Control Conference (ACC)*. IEEE, pp. 2235-2240. American Control Conference


Bacher, P, Madsen, H & Nielsen, HA 2013, Online load forecasting for supermarket refrigeration. in *2013 4th IEEE/PES Innovative Smart Grid Technologies Europe (ISGT EUROPE)*. IEEE. DOI: 10.1109/ISGTEurope.2013.6695467


Barahona Garzón, B, Cutululis, NA, Trombe, P-J & Pinson, P 2013, Regime-based supervisory control to reduce power fluctuations from offshore wind power plants. in *2013 IEEE Grenoble PowerTech (POWERTECH)*. IEEE. DOI: 10.1109/PTC.2013.6652369


Boklund, A, Christiansen, LE, Hisham Beshara Halasa, T & Enøe, C 2013, 'Simulated effects of changes in herd sizes and densities with regard to fmd outbreaks in Denmark' SVEPM Annual Meeting 2013, Madrid, Spain, 20/03/2013 - 22/03/2013,


Hjorth, PG & Karamehmedovic, M 2013, 'Sizing of Microparticles from Angular Scattering Ratio' Paper presented at Foodtech Bazar, Roskilde, Denmark, 30/10/2013,


Löwe, R, Vezzaro, L, Grum, M, Mikkelsen, PS & Madsen, H 2013, 'Stochastic runoff forecasting and real time control of urban drainage systems' 7th Annual Meeting of the Danish Water Research and Innovation Platform, Kgs. Lyngby, Denmark, 31/01/2013 - 31/01/2013,
Stochastic runoff forecasting and real time control of urban drainage systems, Löwe, R, Vezzaro, L, Grum, M, Mikkelsen, PS & Madsen, H


Petersen, LN, Poulsen, NK, Niemann, HH, Utzen, C & Jørgensen, JB 2013, 'The Potential of Economic Model Predictive Control for Spray Drying Plants' 18th Nordic Process Control Workshop, Oulu, Finland, 22/08/2013 - 23/08/2013,

Græsbøll, K, Kirkeby, C, Bødker, R, Stockmarr, A, Christiansen, LE & Lind, P 2013, 'The range of attraction for light traps catching Culicoides biting midges' EDENext Annual Meeting, Barcelona, Spain, 19/03/2013 - 22/03/2013,


Trombe, P-J, Pinson, P, Vedel, H, Barahona Garzón, B & Madsen, H 2013, 'Weather radars for wind energy applications' Danish Wind Power Research 2013, Fredericia, Denmark, 27/05/2013 - 28/05/2013,


Mirzaei, M, Poulsen, NK & Niemann, HH 2012, 'Designing Trailing Edge Flaps of Wind Turbines using an Integrated Design Approach' Paper presented at 10th European Workshop on Advanced Control and Diagnosis, Kgs. Lyngby, Denmark, 08/11/2012 - 09/11/2012,

Rosgaard, MH, Hahmann, AN, Nielsen, TS, Madsen, H, Giebel, G & Sørensen, PE 2012, 'Integrated Wind Power Planning Tool' European Geosciences Union General Assembly 2012, Vienna, Austria, 22/04/2012 - 27/04/2012,


