

Dr Timoleon Kipouros – List of Publications

Refereed Journal Papers

1. MUNK, D. J., KIPOUROS, T., VIO, G. A., STEVEN, G. P. and PARKS, G. T. (2017) 'Topology Optimisation of Micro Fluidic Mixers Considering Fluid-Structure Interactions with a Coupled Lattice Boltzmann Algorithm', in *Journal of Computational Physics*. (to appear).
2. MUNK, D. J., KIPOUROS, T., VIO, G. A., PARKS, G. T. and STEVEN, G. P. (2017) 'Multiobjective and Multi-physics Topology Optimization Using an Updated Smart Normal Constraint Bi-directional Evolutionary Structural Optimization Method', in *Structural and Multidisciplinary Optimization*. DOI: 10.1007/s00158-017-1781-6.
3. MAZLAN, N. M., KIPOUROS, T. and SAVILL, A. M. (2017) 'Evaluating NO_x and CO Emissions of Bio-SPK Fuel Using a Simplified Engine Combustion Model – A Preliminary Study Towards Sustainable Environment', in *Proc IMechE Part G: J Aerospace Engineering*, **Vol. 231**, No 5, 859-865. DOI: 10.1177/0954410016643980.
4. JU, Y., QIN, R., KIPOUROS, T., PARKS, G. T. and ZHANG, C. (2016) 'A High-Dimensional Design Optimisation Method for Centrifugal Impellers', in *Proc IMechE Part A: J Power and Energy*, **Vol. 230**, No 3, 272-288. DOI: 10.1177/0957650915626274.
5. COMER, A. L., KIPOUROS, T. and CANT, R. S. (2016) 'Multi-objective Numerical Investigation of a Generic Airblast Injector Design', in *ASME Journal of Engineering for Gas Turbines and Power*, **Vol. 138**, No 9. DOI: 10.1115/1.4032737.
6. RAUDBERGET, D., LEVANDOWSKI, C., ISAKSSON, O., KIPOUROS, T., JOHANESSON, H. and CLARKSON, P. J. (2015) 'Modelling and Assessing Platform Architectures in Pre-Embodiment Phases through Set-Based Evaluation and Change Propagation', in *Journal of Aerospace Operations*, **Vol. 3**, 203-221. DOI: 10.3233/AOP-150052.
7. MAZLAN, N. M., KIPOUROS, T. and SAVILL, A. M. (2015) 'Effects of Biofuel Properties on Aircraft Engine Performance', in *Aircraft Engineering and Aerospace Technology*, **Vol. 87**, Issue 5, 437-442.
8. OLIVER, J. M., KIPOUROS, T. and SAVILL, A. M. (2015) 'Configuring an Electrical Power Network with Distributed Generation by Multi-Objective Optimization with Evolutionary Computing', in *Emergence: Complexity & Organization*, **Vol. 17**, Issue 2. (available online).
9. NGUYEN, H. A., ABRAMSON, D., KIPOUROS, T., JANKE, A. and GALLOWAY, G. (2015) 'WorkWays: Interacting with Scientific Workflows', in *Concurrency and Computation: Practice and Experience (special Issue)*, **Vol. 27**, No 16, 4377-4397.
10. FURLAN, F., CHIERGHIN, N., KIPOUROS, T., BENINI, E. and SAVILL, A. M. (2014) 'Computational Design of S-Duct Intakes for Distributed Propulsion', in *Aircraft Engineering and Aerospace Technology (special Issue on Distributed Propulsion)*, **Vol 86**, Issue 6, 473-477.
11. FISCHER, G. R., KIPOUROS, T. and SAVILL, A. M. (2014) 'Multi-objective Optimisation of Horizontal Axis Wind Turbine Structure and Energy Production using Aerofoil and Blade Properties as Design Variables', in *Renewable Energy*, **Vol 62**, 506-515. (available online).
12. RAZZAQ, M., TSOTSKAS, C., TUREK, S., KIPOUROS, T., SAVILL, A. M. and HRON, J. (2013) 'Multi-Objective Optimization of a Fluid Structure Interaction Benchmarking', in *CMES: Computer Modeling in Engineering and Sciences*, **Vol 90**, No 4, 303-337.
13. TRAPANI, G., KIPOUROS, T. and SAVILL, A.M (2012) 'The Design of Multi-element Airfoils Through Multi-Objective Optimization Techniques', in *CMES: Computer Modeling in Engineering and Sciences*, **Vol 88**, No 2, 107-140.
14. KIPOUROS, T., JAEGGI, D. M., DAWES, W. N., PARKS, G. T., SAVILL, A. M. and CLARKSON, P. J. (2008) 'Insight Into High-quality Aerodynamic Design Spaces Through Multi-Objective Optimization', in *CMES: Computer Modeling in Engineering and Sciences*, **Vol 37**, No 1, 1-44.
15. KIPOUROS, T., GHISU, T., PARKS, G. T. and SAVILL, A. M. (2008) 'Using Post-Analyses of Optimisation Processes as an Active Computational Design Tool', in *ICCES: International Conference on Computational & Experimental Engineering and Sciences*, **Vol 7**, No 4, 151-157.

16. KIPOUROS, T., JAEGGI, D. M., DAWES, W. N., PARKS, G. T., SAVILL, A. M. and CLARKSON, P. J. (2008) 'Bi-Objective Design Optimisation for Axial Compressors Using Tabu Search', in *AIAA Journal*, **Vol 46**, No 3, 701-711.
17. JAEGGI, D. M., PARKS, G. T., KIPOUROS, T. and CLARKSON, P. J. (2008) 'The Development of a Multi-Objective Tabu Search Algorithm for Continuous Optimisation Problems', in *European Journal of Operational Research (EJOR) feature issue on Adaptation of Discrete Metaheuristics for Continuous Optimisation*, **Vol 185**, No 3, 1192-1212.
18. KIPOUROS, T., JAEGGI, D. M., DAWES, W. N., PARKS, G. T. and SAVILL, A. M. (2005) 'Multi-Objective Aerodynamic Design Optimisation for Axial Compressors', in *ERCRAFTAC Bulletin*, **66** (Sept), 21-24.

Refereed Conference Papers

1. GEORGIADIS, A., SHARMA, S., KIPOUROU, T. and SAVILL, A. M. (2017) 'Predicting and Visualizing Cost Propagation Due to Engineering Design Changes', in *ICED: International Conference on Engineering Design, Vancouver, Canada*. (to appear).
2. NGUYEN, H. A., van IPEREN, Z., RAGHUNATH, S., ABRAMSON, D., KIPOUROU, T. and SOMASEKHARAN, S. (2017) 'Multi-objective Optimisation in Scientific Workflow', in *ICCS: International Conference on Computational Science, Zurich, Switzerland*. *Procedia Computer Science*, **Vol. 108C**, 1443-1452.
3. MUNK, D. J., VIO, G. A., STEVEN, G. P. and KIPOUROU, T. (2017) 'Producing Smart Pareto Sets for Multi-Objective Topology Optimisation Problems', in *WCSMO: World Congress on Structural and Multidisciplinary Optimisation, Braunschweig, Germany*.
4. CRESCENTI, F., KIPOUROU, T., SAVILL, A. M. and TURSI, S. (2017) 'Development of a Computational Model for Topology Optimisation of an Aircraft Wing', in *WCSMO: World Congress on Structural and Multidisciplinary Optimisation, Braunschweig, Germany*.
5. KONTOGIANNIS, S., SAVILL, A. M. and KIPOUROU, T. (2017) 'A Multi-objective Multi-fidelity Framework for Global Optimization', in *AIAA SciTech, Grapevine, Texas*, AIAA-2017-0136.
6. KIPOUROU, T., CAMPGUILHEM, C. and ISAKSSON, O. (2016) 'Value Driven Design for Multi-Disciplinary Engineering Optimisation', in *EngOpt 2016 - International Conference on Engineering Optimisation, Iguassu Falls, Brazil*. (accepted)
7. LOXHAM, J., KIPOUROU, T. and SAVILL, A. M. (2016) 'Towards Uncertainty Quantification and Management in Multi-Disciplinary Design Optimisation', in *CEC 2016 - IEEE Congress on Evolutionary Computation, Vancouver, Canada*, 885-892.
8. RAWLINS, T., LEWIS, A. and KIPOUROU, T. (2016) 'Repairing Blackbox Constraint Violations in Multi-Objective Optimisation by Use of Decision Trees', in *IJCNN 2016 - IEEE International Joint Conference on Neural Networks, Vancouver, Canada*, 1104-1111.
9. KIPOUROU, T. and ISAKSSON, O. (2016) 'Visual Analytics for Evaluation of Value Impact in Engineering Design', in *ECCOMAS Congress, Crete Island, Greece*. 6461-6470.
10. DEMANGE, J., SAVILL, A. M. and KIPOUROU, T. (2016) 'A Multifidelity Multiobjective Optimization Framework for High-Lift Airfoils', in *AIAA Aviation, Washington, D.C.*, AIAA-2016-3367.
11. NIETO-MARTIN, J., MARTINEZ-ANIDO, C. B., FLORITA, A., KIPOUROU, T., HODGE, B. M. and SAVILL, A. M. (2016) 'Impact of Wind Topology on the ISO of New England Nodal Electricity Price', in *EWEA Wind Energy Summit, Hamburg, Germany*. **Best Wind Integration Study**.
12. NIETO-MARTIN, J., BUTANS, E., KIPOUROU, T., VARGA, L. and SAVILL, A. M. (2016) 'Model-driven Nodal Network Analysis and Investment Planning in Smart Grids', in *4th Numerical Evolutionary Optimization Conference, Mexico City, Mexico*.
13. NIETO-MARTIN, J., BUTANS, E., WOODRU, J. A., KIPOUROU, T. and SAVILL, A. M. (2016) 'Smart Grids Evolutionary Planning: A Model-driven Nodal Investment Optimisation for the 11kV Network', in *7th Hubnet Smart Grid Symposium, Glasgow, United Kingdom*.
14. NIETO-MARTIN, J., MARTINEZ-ANIDO, C. B., KIPOUROU, T., HODGE, B. M. and SAVILL, A. M. (2016) 'Impact of Wind Topologies on Nodal Electricity Prices', in *3rd WholeSEM Conference, Cambridge, United Kingdom*.
15. DI PASQUALE, D., GORE, D., SAVILL, A. M., KIPOUROU, T. and HOLDEN, C. (2016) 'Cost Modelling for Aircraft in a Multi-disciplinary Design Context', in *Advances in Transdisciplinary Engineering, Vol. 3*, 471-476.
16. YUAN, J., SAVILL, A. M., KIPOUROU, T., COGGON, S. and SCARPA, F. (2016) 'Probabilistic Margin Assessment of Aircraft Conceptual Design Using a Modified Reliability Based Design Optimisation Methodology', in *Proceedings of USD2016 - International Conference on Uncertainty in Structural Dynamics*. 4463-4477.
17. DEMANGE, J., SAVILL, A. M. and KIPOUROU, T. (2016) 'Multi-Fidelity Optimization for High-Lift Airfoils', in *AIAA SciTech, San Diego, California*, AIAA-2016-0557.
18. KIPOUROU, T., AGIRRE-MENTXAKA, A. and HAHN, M. (2015) 'Historic Data Mapping for Aircraft Computational Design', in *ECCOMAS Workshop on Reduced Basis, POD and PGD Model Reduction Techniques, Cachan, France*.

19. DI PASQUALE, D., KIPOUROS, T., HOLDEN, C. and SAVILL, A. M. (2015) 'Integrated Systems for Aerodynamic Shape Optimisation', in *EUROGEN-2015, Glasgow, UK*.
20. KIPOUROS, T. ALLEN, A., GHISU, T. and JARRETT, J. (2015) 'Enabling Multi-Fidelity Optimisation Approaches in Isight', in *Simulia Community Conference, Berlin, Germany*.
21. TSOTSKAS, C., KIPOUROS, T. and SAVILL, A. M. (2015) 'Fast Multi-Objective Optimisation of a Micro-Fluidic Device by Using Graphics Accelerators', in *ICCS: International Conference on Computational Science, Reykjavik, Iceland*. Procedia Computer Science, **Vol. 51**, 2237-2246.
22. RANDALL, M., RAWLINS, T., LEWIS, A. and KIPOUROS, T. (2015) 'Performance Comparison of Evolutionary Algorithms for Airfoil Design', in *ICCS: International Conference on Computational Science, Reykjavik, Iceland*. Procedia Computer Science, **Vol. 51**, 2267-2276.
23. RAWLINS, T., LEWIS, A., HETTENHAUSEN, J. and KIPOUROS, T. (2015) 'Enhancing ANN-guided MOPSO through Active Learning', in *IJCNN 2015 - IEEE International Joint Conference on Neural Networks, Killarney, Ireland*.
24. LEWIS, A. and KIPOUROS, T. (2015) 'Methods of Interactive Optimisation in Engineering Design', in *13th International Conference on Computer Applications (ICCA2015), Yangon, Myanmar*.
25. NGUYEN, H. A., ABRAMSON, D., KIPOUROS, T., JANKE, A. and GALLOWAY, G. (2014) 'WorkWays: Interacting with Scientific Workflows', in *9th Gateway Computing Environments Workshop, New Orleans, LA*, 21-24.
26. NIETO-MARTIN, J., KIPOUROS, T. and SAVILL, A. M. (2014) 'Smart Grids Modelling and Simulation for Distributed Power Supply Networks', in *5th Hubnet Smart Grid Symposium, Glasgow, United Kingdom*. **Third Prize**.
27. DI PASQUALE, D., KIPOUROS, T., HOLDEN, C. and SAVILL, A. M. (2014) 'An Automatic Aerodynamic Design Process in a Multi-Disciplinary Context', in *WCCM/ECCOMAS/IACM 11th World Congress on Computational Mechanics, Barcelona, Spain*.
28. RAWLINS, T., LEWIS, A., HETTENHAUSEN, J. and KIPOUROS, T. (2014) 'Enhancing MOPSO through the Guidance of ANNs', in *IJCNN 2014 - IEEE International Joint Conference on Neural Networks, Beijing, China*, IEEE-2014-, 4003-4010.
29. KIPOUROS, T. (2014) 'Human-in-the-loop Computational Engineering Design', in *Proceedings of EVOLVE 2014, Beijing, China*. (invited)
30. HETTENHAUSEN J., KIPOUROS, T. and LEWIS, A. (2014) 'A Web-Based System for Visualisation-Driven Interactive Multi-Objective Optimisation', in *ICCS: International Conference on Computational Science, Cairns, Australia*. Procedia Computer Science, **Vol. 29**, 1915-1925.
31. OLIVER, J. M., KIPOUROS, T. and SAVILL, A. M. (2014) 'Electrical Power Grid Network Optimisation by Evolutionary Computing', in *ICCS: International Conference on Computational Science, Cairns, Australia*. Procedia Computer Science, **Vol. 29**, 1948-1958.
32. TSOTSKAS, C., KIPOUROS, T. and SAVILL, A. M. (2014) 'The Design and Implementation of a GPU-enabled Multi-Objective Tabu Search intended for Real World and High-Dimensional Applications', in *ICCS: International Conference on Computational Science, Cairns, Australia*. Procedia Computer Science, **Vol. 29**, 2152-2161.
33. NGUYEN, H., ABRAMSON, D. and KIPOUROS, T. (2014) 'The WorkWays Problem Solving Environment', in *ICCS: International Conference on Computational Science, Cairns, Australia*. Procedia Computer Science, **Vol. 29**, 2284-2294.
34. RANDALL, M., LEWIS, A., HETTENHAUSEN, J. and KIPOUROS, T. (2014) 'Local Search Enabled Extremal Optimisation for Continuous Inseparable Multi-objective Benchmark and Real-World Problems', in *ICCS: International Conference on Computational Science, Cairns, Australia*. Procedia Computer Science, **Vol. 29**, 1904-1914.
35. TRAPANI, G., SAVILL, A. M., KIPOUROS, T., AGOSTINELLI, C. and RAMPURAWALA, A. (2014) 'A Rapid Approach to the Aerodynamic Design of a Flexible High-Lift Wing', in *AIAA Aviation, 32nd AIAA Applied Aerodynamics Conference, Atlanta, Georgia, AIAA-2014-2011*.
36. KIPOUROS, T. and ISAKSSON, O. (2014) 'Integrating Value Assessment into the Computational Engineering Design Cycle', in *OPTI 2014: International Conference on Engineering and Applied Sciences Optimization, Kos Island, Greece*, Paper 3620.

37. INSELBERG, A. and KIPOUROS, T. (2014) 'Multidimensional Visualization for Multi Objective Optimization: A Match made in Heaven', in *OPTI 2014: International Conference on Engineering and Applied Sciences Optimization, Kos Island, Greece*, Paper 3093.
38. KIPOUROS, T., BRAMPTON, C. J. and KIM, H. A. (2014) 'A Coupling of Multi-Objective Flow and Topology Optimisation', in *OPTI 2014: International Conference on Engineering and Applied Sciences Optimization, Kos Island, Greece*, Paper 3091.
39. KIPOUROS, T. and LEWIS, A. (2014) 'Understanding the Complexities in Turbomachinery Design by Visualising the Discontinuous Areas in the Design Parameter Space', in *OPTI 2014: International Conference on Engineering and Applied Sciences Optimization, Kos Island, Greece*, Paper 3090.
40. FERRARO, G., KIPOUROS, T., SAVILL, A. M., RAMPURAWALA, A. and AGOSTINELLI, C. (2014) 'Propeller-Wing Interaction Prediction for Early Design', in *AIAA SciTech: Science and Technology Forum and Exposition, National Harbor, Maryland, AIAA-2014-0564*.
41. FERRARO, G., KIPOUROS, T., SAVILL, A. M. and RAMPURAWALA, A. (2014) 'Multi-Objective Genetic Design Optimisation for Early Design', in *AIAA SciTech: Science and Technology Forum and Exposition, National Harbor, Maryland, AIAA-2014-0552*.
42. OLIVER, J. M., KIPOUROS, T. and SAVILL, A. M. (2013) 'An Evolutionary Computing-based Approach to Electrical Power Network Configuration', in *ECCS '13: European Conference on Complex Systems, Barcelona, Spain*.
43. TSOTSKAS, C., KIPOUROS, T. and SAVILL, A. M. (2013) 'High Performance Micro-Fluidic Studies with the Lattice Boltzmann Method for Environmentally-Friendly Applications', in *10th ICMES - International Conference for Mesoscopic Methods in Engineering and Science, Oxford, UK*.
44. OLIVER, J. M., KIPOUROS, T. and SAVILL, A. M. (2013) 'A Self-adaptive Genetic Algorithm Applied to a Multi-Objective Optimization Engineering Problem', in *Proceedings of EVOLVE 2013, Leiden, The Netherlands. Advances in Intelligent Systems and Computing, Vol. 227*, Springer-Verlag, Berlin 261-276.
45. KIPOUROS, T. (2013) 'Visualisation and Management of Real-World High-Dimensional Optimisation Data Using Parallel Coordinates', in *GECCO 2013 - Genetic and Evolutionary Computation Conference, Amsterdam, The Netherlands* (invited talk to the VizGEC Workshop - Visualisation Methods in Genetic and Evolutionary Computation).
46. TRAPANI, G., SAVILL, A. M., KIPOUROS, T., AGOSTINELLI, C. and RAMPURAWALA, A. (2013) 'Optimisation of a Flexible High Lift Wing', in *IFASD 2013 - International Forum on Aeroelasticity and Structural Dynamics, Bristol, UK*.
47. LATTARULO, V., KIPOUROS, T. and PARKS, G. T. (2013) 'Application of the Multi-objective Alliance Algorithm to a Benchmark Aerodynamic Optimization Problem', in *CEC 2013 - IEEE Congress on Evolutionary Computation, Cancun, Mexico, IEEE-2013-1503, 3182-3189*.
48. HETTENHAUSEN, J., LEWIS, A., RANDALL, M. and KIPOUROS, T. (2013) 'Interactive Multi-Objective Particle Swarm Optimisation using Decision Space Interaction', in *CEC 2013 - IEEE Congress on Evolutionary Computation, Cancun, Mexico, IEEE-2013-1350, 3411-3418*.
49. SADDAWI, S. D., KIPOUROS, T. and SAVILL, A. M. (2013) 'Computational Engineering Design for Micro-scale Combustion Devices: A Thermally Improved Configuration', in *Proceedings of ASME Turbo Expo 2013, San Antonio, Texas, GT2013-94599*.
50. KIPOUROS, T., INSELBERG, A., PARKS, G. T. and SAVILL, A. M. (2013) 'Parallel Coordinates in Computational Engineering Design', in *9th AIAA Multi-Disciplinary Design Optimization Specialist Conference, Boston, Massachusetts, AIAA-2013-1750*.
51. TSOTSKAS, C., KIPOUROS, T. and SAVILL, A. M. (2013) 'Biobjective Optimisation of Preliminary Aircraft Trajectories Using Tabu Search', in *7th International Conference of Evolutionary Multi-Criterion Optimisation, Sheffield, UK. Lecture Notes in Computer Science, Vol. 7811*, Springer-Verlag, Berlin 741-756.
52. HETTENHAUSEN, J., LEWIS, A., KIPOUROS, T., RAWLINS, T. and MIRJALILI, S. (2012) 'Interactive Multi-Objective Particle Swarm Optimisation for Computational Fluid Dynamics Applications', in *Proceedings of CTAC - 16th Biennial Computational Techniques and Applications Conference, Brisbane, Queensland, 36-37*.

53. KIPOUROS, T. (2012) 'Stochastic Optimisation in Computational Engineering Design', in *Proceedings of EVOLVE 2012, Mexico City, Mexico*, (invited). Advances in Intelligent and Soft Computing, **Vol. 175**, Springer-Verlag, Berlin 475-490.
54. SADDAWI, S. D., KIPOUROS, T. and SAVILL, A. M. (2012) 'Computational Engineering Design for Micro-scale Combustors', in *Proceedings of ASME Turbo Expo 2012, Copenhagen, Denmark*. GT2012-69522.
55. MAZLAN, N., SAVILL, A. M., KIPOUROS, T. and LI, Y-G. (2012) 'A Numerical Study into the Effects of Bio-synthetic Paraffinic Kerosine Blends with Jet-A Fuel for Civil Aircraft Engine', in *Proceedings of ASME Turbo Expo 2012, Copenhagen, Denmark*. GT2012-68754.
56. GUO, G., KIPOUROS, T., SHAPIRO, E. and SAVVARIS, A. (2012) 'On the Effect of Turbulence Modelling in Design Optimisation for High-lift Devices', in *8th AIAA Multi-Disciplinary Design Optimization Specialist Conference, Honolulu, Hawaii*, AIAA-2012-1424.
57. KIPOUROS, T., GHISU, T., PARKS, G. T. and SAVILL, A. M. (2012) 'An Investigation of Higher-order Multi-objective Optimisation for 3D Aerodynamic Shape Design', in *8th AIAA Multi-Disciplinary Design Optimization Specialist Conference, Honolulu, Hawaii*, AIAA-2012-1427.
58. KIPOUROS, T., PEACHEY, T., ABRAMSON, D. and SAVILL, A. M. (2012) 'Enhancing and Developing the Practical Optimisation Capabilities and Intelligence of an Automatic Design Software', in *8th AIAA Multi-Disciplinary Design Optimization Specialist Conference, Honolulu, Hawaii*, AIAA-2012-1677.
59. FISCHER, G. R., KIPOUROS, T. and SAVILL, A. M. (2012) 'Multi-Objective Shape Optimisation for Horizontal-Axis Wind Turbine Blades', in *8th AIAA Multi-Disciplinary Design Optimization Specialist Conference, Honolulu, Hawaii*, AIAA-2012-1353.
60. GUERRERO VELA, P. P., KIPOUROS, T. and SAVILL, A. M. (2012) 'Aero-Structural Airfoil Design Optimisation for Cruising Configuration Using Tabu Search', in *Pegasus AIAA Conference, Seville, Spain*.
61. D'AMMARO, A., KIPOUROS, T., SAVILL, A. M. and DJENIDI, L. (2011) 'Computational Design for Micro Fluidic Devices Using Lattice Boltzmann and Heuristic Optimisation Algorithms', in *the European Numerical Mathematics and Advanced Applications (ENUMATH) Conference, Leicester, UK*.
62. KIPOUROS, T., PEACHEY, T., ABRAMSON, D. and SAVILL, A. M. (2011) 'Enhancing the Optimisation Capabilities and Intelligence of an Automatic Design Software', in *Proceedings of UK e-Science All Hands Meeting, York, UK*.
63. FERRARO, G., KIPOUROS, T., SAVILL, A. M. and ABRAMSON, D. (2010) 'Grid Computing Design Optimisation Using MOGA and NIMROD/O', in *Proceedings of UK e-Science All Hands Meeting, Cardiff, UK*.
64. TRAPANI, G., KIPOUROS, T. and SAVILL, A. M. (2010) 'Computational Aerodynamics Design for 2D High-Lift Airfoil Configurations', in *Pegasus AIAA Conference, Seville, Spain*.
65. D'AMMARO, A., KIPOUROS, T., SADDAWI, S. D. and SAVILL, A. M. (2010) 'Modelling and Optimisation of a micro-mixer based on Lattice Boltzmann Simulations', in *Proceedings of Joint OCCAM/ICFD Lattice Boltzmann Workshop, Oxford, UK*.
66. PANDYA, B., D'SOUZA, N. T., KIPOUROS, T. and SAVILL, A. M. (2010) 'Structural Design Optimisation for Helical Gear Pairs', in *NAFEMS UK Conference 2010, Oxford, UK*.
67. KIPOUROS, T., PACHIDIS, V., GHISU, T. and TEMPLALEXIS, I. (2010) 'Characterisation of the Uncertainties of the Operating Conditions in Turbomachinery Design', in *Proceedings of ASME Turbo Expo 2010, Glasgow, UK*. GT2010-23253.
68. KIPOUROS, T., DUNSTAN, T. D., JENKINS, K. W. and CANT, R. S. (2008) 'Towards the Development of a Complete Computational Design System for Complicated and Advanced Combustion Applications', in *SIAM 12th International Conference on Numerical Combustion, Monterey, California*.
69. KIPOUROS, T., MLECZKO, M. and SAVILL, A. M. (2008) 'Use of Parallel-Coordinates for Post-Analyses of Multi-Objective Aerodynamic Optimisation in Turbomachinery', in *4th AIAA Multi-Disciplinary Design Optimization Specialist Conference, Schaumburg, Illinois*. AIAA-2008-2138.

70. KIPOUROS, T., JENKINS, K. W. and SAVILL, A. M. (2008) 'Development of Computational Tools for the Engineering Design Optimisation of Microcombustors', in *5th ECCOMAS, Venice, Italy*.
71. KIPOUROS, T., MOLINARI, M., DAWES, W. N., PARKS, G. T., SAVILL, A. M. and JENKINS, K. W. (2007) 'An Investigation of the Potential for Enhancing the Computational Turbomachinery Design Cycle Using Surrogate Models and High Performance Parallelisation', in *Proceedings of ASME Turbo Expo 2007, Montreal, Canada*. GT2007-28106.
72. KIPOUROS, T., JAEGGI, D. M., DAWES, W. N., PARKS, G. T. and SAVILL, A. M. (2005) 'Multi-Criteria Optimisation of Turbomachinery Blades: Investigating the Trade-off Surface', in *41st AIAA/ASME/SAE/ASEE Joint Propulsion Conference & Exhibit, Tucson, Arizona*. AIAA-2005-4023.
73. KIPOUROS, T., JAEGGI, D. M., DAWES, W. N., PARKS, G. T. and SAVILL, A. M. (2005) 'Multi-Objective Optimisation of Turbomachinery Blades Using Tabu Search', in *3rd International Conference of Evolutionary Multi-Criterion Optimisation, Guanajuato, Mexico*. Lecture Notes in Computer Science, **Vol. 3410**, Springer-Verlag, Berlin 897-910.
74. JAEGGI, D. M., PARKS, G. T., KIPOUROS, T. and CLARKSON, P. J. (2005) 'A Multi-Objective Tabu Search Algorithm for Constrained Optimisation', in *3rd International Conference of Evolutionary Multi-Criterion Optimisation, Guanajuato, Mexico*. Lecture Notes in Computer Science, **Vol. 3410**, Springer-Verlag, Berlin 490-504.
75. JAEGGI, D. M., ASSELIN-MILLER, C., PARKS, G. T., KIPOUROS, T., BELL, T. and CLARKSON, P. J. (2004) 'Multi-Objective Parallel Tabu Search', in *the 8th International Conference on Parallel Problem Solving From Nature (PPSN), Birmingham, UK*. Lecture Notes in Computer Science, **Vol. 3242**, Springer-Verlag, Berlin 732-741.
76. KIPOUROS, T., PARKS, G. T., SAVILL, A. M. and JAEGGI, D. M. (2004) 'Multi-Objective Aerodynamic Design Optimisation', in *ERCRAFT Design Optimisation: Methods & Applications, International Conference & Advanced Course Program, Athens, Greece*. Conference Proceedings on CD Rom, ERCODO2004_239.

Theses – Reports

1. KIPOUROS, T. (2006) 'Multi-Objective Aerodynamic Design Optimisation', PhD Thesis Dissertation, Department of Engineering, University of Cambridge, UK.
2. KIPOUROS, T. (2003) 'Multi-Objective Aerodynamic Design Optimisation', 1st Year PhD Report, Department of Engineering, University of Cambridge, UK.

Posters & Presentations in Industrial and International Workshops and Tutorials

1. KIPOUROS, T. (2016) 'Support Human-Computer Interaction to Enhance Computational Engineering Design', in *3rd International Conference on Computer Graphics & Animation, Las Vegas, USA*. **Invited Keynote**.
2. KIPOUROS, T. (2016) 'Parallel Coordinates for Value Driven Design', in *20th International Conference on Information Visualisation, Lisbon, Portugal*. (As part of the Tutorial: *Parallel Coordinates*, with Alfred Inselberg).
3. KIPOUROS, T., ISAKSSON, O. and CLARKSON, P. J. (2015) 'Use of Design Structure Matrices to represent, exchange, and communicate information within Super Integration Plugins', in *M28 Workshop TOICA project, Amsterdam, The Netherlands*.
4. MATTIOLI, M., KIPOUROS, T. and SAVILL, A. M. (2015) 'Aerodynamic Design Sensitivities and Uncertainty Management', in *Uncertainty Quantification and Management in High Value Manufacturing SIG, London, UK*.
5. MORO, M., KIPOUROS, T. and SAVILL, A. M. (2015) 'Robust Aerodynamic Optimisation of a High-Lift Wing Configuration with Polynomial Chaos', in *Uncertainty Quantification and Management in High Value Manufacturing SIG, London, UK*.
6. KIPOUROS, T. and ISAKSSON, O. (2015) 'Value Assessment using Super Integration', in *13th Automatic Design Optimisation Seminar (ADOS 2015), Rolls-Royce plc., Derby, UK*.
7. KIPOUROS, T. (2015) 'Human-in-the-loop Optimisation for Engineering Design', in *DiPaRT Annual Meeting, Airbus, Bristol, UK*.
8. DEMANGE, J., KIPOUROS, T. and SAVILL, A. M. (2015) 'Mutlifidelity Optimisation for High-Lift Airfoils', in *Airbus PhD Day, Toulouse, France*.

9. KIPOUROS, T. (2015) 'Interactive Visualisation for Engineering Design', in *IEEE International Symposium on Big Data Visual Analytics*, Hobart, Tasmania, Australia. (As part of the Workshop: *Multi-Dimensional Data Visualisation with Parallel Coordinates*, with Julian Heinrich and Alfred Inselberg).
10. KIPOUROS, T. (2014) 'Using Parallel Coordinates to guide Optimisation Processes', in *IEEE Vis 2014*, Paris, France. (As part of the Tutorial: *Answering questions that we did not know how to ask*, with Alfred Inselberg).
11. KIPOUROS, T. and ISAKSSON, O. (2014) 'Integrating Value Assessment into the Computational Engineering Design Cycle', in *DiPaRT Workshop: The Airbus Flight Physics Distributed R&T Partnership - Annual Meeting*, Airbus, Bristol, UK.
12. KIPOUROS, T. (2014) 'Dynamic Data Driven Applications Systems for Multi-Disciplinary Design Optimisation of Aircraft Configurations', in *DiPaRT Workshop: MDA&O in Aircraft Design*, Airbus, Bristol, UK.
13. KIPOUROS, T. and ISAKSSON, O. (2014) 'Integrating Value Assessment into the Computational Engineering Design Cycle', in *12th Automatic Design Optimisation Seminar (ADOS 2014)*, Rolls-Royce plc., Derby, UK.
14. KIPOUROS, T. (2014) 'Using Parallel Coordinates to guide Optimisation Processes', in *12th Automatic Design Optimisation Seminar (ADOS 2014)*, Rolls-Royce plc., Derby, UK.
15. KIPOUROS, T. (2013) 'Process Analysis and Decision Making in Computational Engineering Design Using Parallel Coordinates', in *DiPaRT Workshop: Flight Physics of the Future Wing*, Airbus, Bristol, UK.
16. KIM, H. A. and KIPOUROS, T. (2013) 'High Fidelity Multidisciplinary Topology Optimisation with Fluid-Structure Coupling', in *DiPaRT Workshop: Flight Physics of the Future Wing*, Airbus, Bristol, UK.
17. AMIN, R., HOLDEN, C., SAVILL, A. M. and KIPOUROS, T. (2013) 'Reducing Complexities to Enabling Multi-Disciplinary Wing Design', in *Airbus PhD Day*, Bristol, UK.
18. FERRARO, G., SAVILL, A. M., KIPOUROS, T. and MILLER, A. (2013) 'Rapid Longitudinal Aerodynamic Performance Prediction', in *Airbus PhD Day*, Bristol, UK.
19. KIPOUROS, T. (2013) 'Process Analysis and Decision Making in Computational Engineering Design Using Parallel Coordinates', in *11th Automatic Design Optimisation Seminar (ADOS 2013)*, Rolls-Royce plc., Derby, UK.
20. HETTENHAUSEN, J., LEWIS, A. and KIPOUROS, T. (2013) 'An Interactive Approach for Multi-Objective Aerodynamic Design Optimisation', in *11th Automatic Design Optimisation Seminar (ADOS 2013)*, Rolls-Royce plc., Derby, UK.
21. KIPOUROS, T. (2012) 'Characterisation of the Uncertainties of the Operating Conditions in Aerodynamic Design', in *DiPaRT Workshop: Uncertainty Quantification and Management in Aircraft Design*, Airbus, Bristol, UK.
22. KIPOUROS, T., INSELBERG, A., PARKS, G. T. and SAVILL, A. M. (2012) 'Post-Analysis and Decision Making in Computational Engineering Design Using Parallel Coordinates', in *10th Automatic Design Optimisation Seminar (ADOS 2012)*, Rolls-Royce plc., Derby, UK.
23. DI PASQUALE, D., KIPOUROS, T., SAVILL, A. M. and HOLDEN, C. (2012) 'Multi-Disciplinary Design for the Whole Aircraft Application', in *Airbus PhD Day*, Madrid, Spain.
24. AMIN, R., KIPOUROS, T., SAVILL, A. M. and HOLDEN, C. (2012) 'Complexities to Enabling Multi-Disciplinary Wing Design', in *Airbus PhD Day*, Madrid, Spain.
25. FERRARO, G., SAVILL, A. M., KIPOUROS, T. and MILLER, A. (2011) 'Rapid Longitudinal Performance Prediction', in *Airbus PhD Day*, Toulouse, France.
26. TRAPANI, G., SAVILL, A. M., KIPOUROS, T. and TURSI, S. (2011) 'Multi-Disciplinary Optimisation of Novel Aircraft Configurations', in *Airbus PhD Day*, Toulouse, France.
27. KIPOUROS, T., INSELBERG, A., PARKS, G. T. and SAVILL, A. M. (2011) 'Parallel Coordinates in Computational Engineering Design', in *9th Automatic Design Optimisation Seminar (ADOS 2011)*, Rolls-Royce plc., Derby, UK.
28. KIPOUROS, T., PEACHEY, T., ABRAMSON, D. and SAVILL, A. M. (2011) 'Enhancing and Developing the Practical Optimisation Capabilities and Intelligence of an Automatic Design Software', in *9th Automatic Design Optimisation Seminar (ADOS 2011)*, Rolls-Royce plc., Derby, UK.
29. KIPOUROS, T., PACHIDIS, V., GHISU, T. and TEMPLALEXIS, I. (2010) 'Characterisation of the Uncertainties of the Operating Conditions in Turbomachinery Design', in *8th Automatic Design Optimisation Seminar (ADOS 2010)*, Rolls-Royce plc., Derby, UK.

30. PARMAR, K., SAVILL, A. M., KIPOUROS, T. and GARRY, K. (2010) 'The Aerodynamic Effects of Runback Ice', in *Airbus PhD Day*, Hamburg, Germany.
31. KIPOUROS, T. and SAVILL, A. M. (2009) 'Virtual Reality Display of Design Optimisation', in *Emerging Application for 3D Technologies and Interactivity, London Technology Network*, London, UK.
32. KIPOUROS, T., GHISU, T., PARKS, G. T. and SAVILL, A. M. (2008) 'Use of Parallel Coordinates for Post-Analyses of Multi-Objective Aerodynamic Design Optimisation in Turbomachinery', in *6th Aerodynamic Design Optimisation Seminar (ADOS 2008)*, Rolls-Royce plc, Derby, UK.
33. KIPOUROS, T., JAEGGI, D. M., DAWES, W. N., PARKS, G. T. and SAVILL, A. M. (2005) 'Multi-Objective Design Optimisation for Axial Compressors', in *3rd Aerodynamic Design Optimisation Seminar (ADOS 2005)*, Rolls-Royce plc, Derby, UK.