ACHIEVEMENTS
PRESENTATIONS and TALKS

	DATE	MUCM SPEAKER	TITLE	LOCATION
1	05 Jun 06	O'Hagan	"Quantifying uncertainty in the biospheric carbon flux for England and Wales"	7th Valencia International Meeting on Bayesian Statistics, Spain.
2	26 Jun 06	O'Hagan	"Introduction to emulators"	Workshop on uncertainty in climate models, Royal Holloway.
3	Sep 06	Cornford & Maniyar	"Dealing with large complex models in emulators: Guided Bayesian committee machine"	SAMSI workshop on Development, Assessment and Utilization of Complex Computer Models, Durham, NC, USA.
4	Sep 06	Cumming	"Bayes Linear Analysis for Large Computer Models" (Poster)	SAMSI workshop on Development, Assessment and Utilization of Complex Computer Models, Durham, NC, USA.
5	08 Sep 06	O'Hagan	"An introduction to computer experiments and their design problems"	DEMA (Design of Experiments: Methods and Applications) 2006, Southampton.
6	08 Sep 06	Wynn	"The algebraic method in the design of experiments". Designed Experiments: recent advances in methods and applications: DEMA2006"	University of Southampton
7	11 Sep 06	O'Hagan	"Simulators, emulators, predictors – Validity, quality, adequacy	SAMSI workshop on Development, Assessment and Utilization of Complex Computer Models, Durham, NC, USA.
8	12 Sep 06	Gosling	"Quantifying uncertainty in the biospheric carbon flux for England and Wales"	SAMSI workshop on Development, Assessment and Utilization of Complex Computer Models, Durham, NC, USA.
9	Oct 06	Rougier	"How can probability be used to quantify uncertainty in climate predictions?"	RAPID International Meeting, Birmingham
10	18 Oct 06	Wynn	"The history and foundations of experimental design"	Institute of Advanced Studies, University of Bologna. Special lecture
11	26 Oct 06	O'Hagan	"Managing uncertainty in complex models"	SAMSI (Statistics and Applied Mathematical Science Institute) Distinguished Lecture, Research Triangle, North Carolina.
12	27 Oct 06	O'Hagan	"MUCM and GSK - uncertainty in models"	GlaxoSmithKline seminar, Research Triangle, North Carolina.
13	12 Jan 07	Gattiker	"Calibrating Climate Models: a case study and comparison of DACE approaches."	Royal Statistical Society Environmental Statistics Section meeting, Southampton.
14	12 Jan 07	Gosling	"GEM-SA"	Royal Statistical Society Environmental Statistics Section meeting, Southampton.
15	12 Jan 07	Gosling	"Uncertainty analysis and sensitivity analysis"	Royal Statistical Society Environmental Statistics Section meeting, Southampton.
16	12 Jan 07	O'Hagan	"The estimation of the net CO2 flux for England & Wales and its uncertainty using emulation"	Royal Statistical Society Environmental Statistics Section meeting, Southampton.
17	12 Jan 07	Rougier	"Emulator diagnostics and emulator construction".	Royal Statistical Society Environmental Statistics Section meeting, Southampton.
18	24 Jan 07	O'Hagan	"Uncertainty in the outputs of complex mechanistic models"	Seminar at Department of Mathematics, Oslo University.
19	Feb 07	Cumming	"Dimension reduction via principal variables"	Postgraduate Seminar, Mathematical Sciences, Durham, UK
20	Mar 07	Boukouvalas	"Workshop on Smoothing-Based and Gaussian-Process-Based Methods for Non-Parametric Regression in Environmental Problems"	ICMS, Edinburgh, UK, 26-30 March 2007
21	Mar 07	Cornford	"Data assimilation, Bayesian inference and Gaussian processes: opportunities and challenges, Smoothing-Based and Gaussian-Process-Based Methods for Non-Parametric Regression in Environmental Problems"	ICMS, Edinburgh, UK, 26-30 March 2007
22	07 Mar 07	Wynn	"The vital role of statistics in science and industry"	Norwegian Computing Centre. Kick-off work shop for new centre: Statistics for Innovation: (Sfi)^2
23	27 Mar 07	Goldstein	"Uncertainty analysis for complex physical models"	Research Students in Statistics Conference, Durham
24	29 Mar 07	Bastos	"Validation of Gaussian Process Emulators"	Research Students in Statistics Conference, Durham
25	29 Mar 07	Challenor	"Probability of Rapid Climate Change"	Workshop on Smoothing-Based and Gaussian-Process-Based Methods for Non-Parametric Regression in Environmental Problems. ICMS, Edinburgh
26	29 Mar 07	Gosling	"Uncertainty in environmental modelling: carbon flux calculations for England and Wales"	ICMS, Edinburgh
27	29 Mar 07	Stephenson	"Using Derivative and Integral Information in the Statistical Analysis of Computer Models"	Research Students in Statistics Conference, Durham
28	02 Apr 07	Gattiker	"Hierarchical Calibration"	MUCM / SAMSI Workshop on Development, Assessment and Utilization of Complex Computer Models, Durham, NC, USA.
29	02 Apr 07	Rougier	"State-Space Modelling of Soil Moisture"	MUCM / SAMSI Workshop on Development, Assessment and Utilization of Complex Computer Models, Durham, NC, USA.
30	03 Apr 07	Gosling	"Emulation of dynamic computer codes"	MUCM / SAMSI Workshop on Development, Assessment and Utilization of Complex Computer Models, Durham, NC, USA.
31	03 Apr 07	Maruri-Aguilar	"Generalised Aberration for Space Filling Designs"	MUCM / SAMSI Workshop on Development, Assessment and Utilization of Complex Computer Models, Durham, NC, USA.
32	03 Apr 07	O'Hagan	"Cholesky decomposition - a tool with many uses"	MUCM / SAMSI Workshop on Development, Assessment and Utilization of Complex Computer Models, Durham, NC, USA.
33	19 Apr 07	O'Hagan & Challenor	"Uncertainty in Complex Models"	BBC Radio 4 "Material World"
34	May 07	Boukouvalas	"High Dimensionality Theme Day"	University of Aston

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	DATE	MUCM SPEAKER	TITLE	LOCATION
35	15 May 07	House, Goldstein & Rougier	"Better Judgements through Multimuple Model Ensembles"	SAMSI
36	17 May 07	O'Hagan	"Quantifying uncertainty in the UK carbon flux"	Royal Statistical Society, Kent Local Group.
37	Jun 07	Boukouvalas	Screening strategies for high dimensional input spaces	NCRG Seminar, University of Aston
38	06 Jun 07	Maruri-Aguilar	"A model selection algorithm for mixture experiments including process variables"	mODa 8, Almagro, Spain.
39	06 Jun 07	O'Hagan	"Simulation and uncertainty"	INFORMS I-Sim Workshop, Fontainebleu, France
40	07 Jun 07	Wynn	"Bayesian information-based learning"	mODa 8, Almagro, Spain.
41	Jul 07	Boukouvalas	"Screening strategies for high dimensional input spaces"	ISSPR conference, Plymouth, July 2007
42	Jul 07	Wynn	"Free resolution and tight multi-state reliability bounds"	MMR 2007, Glasgow.
43	05 Jul 07	Challenor	Probability of Rapid Climate Change	IUGG, Perugia, Italy
44	30 Jul 07	Maruri-Aguilar	"Space filling designs"	MUCM Theme day, LSE.
45	Aug 07	Wynn	"Betti numbers and minimal free resolutions in multi-state system reliability"	MEGA 2007, Stroble am Wolfgangsee, Austria.
46	Sep 07	Wynn	"Kantorovich-type inequalities via D-optimal design theory"	2nd IMA conference on linear algebra and optimisation.
47	25 Sep 07	Gattiker	"Integrating calibration from multiple climate model diagnostics"	PUCM Workshop (Probability and Uncertainty in Climate Models), Durham
48	Oct 07	Wynn	"An algebraic framework for Bayes nets and time series: proyections stochastic realisations and recurrence"	Giorgio Picci 65th birthday conference, Venezia.
49	Oct 07	Wynn	"Algebraic statistics on varieties"	MFO (Oberwolfach).
50	19 Oct 07	Rougier	Comments on "Inferring climate system properties using a computer model"	Ninth workshop on Case Studies of Bayesian Statistics, CMU, Pittsburgh PA, USA
51	25 Oct 07	Maruri-Aguilar	"Algebraic techniques in design of experiments"	Queen Mary University, London.
52	03 Nov 07	Wynn	"Generalised experimental design over algebraic varieties"	DAE 2007, Memphis.
53	05 Nov 07	Maruri-Aguilar	"Algebraic statistics in design of experiments"	ISM, Tokyo.
54	14 Nov 07	Challenor	"The Probability of Rapid Climate Change"	RSS North East Local Group, Newcastle University
55	26 Nov 07	Stephenson	"Using Derivative Information in the Statistical Analysis of Computer Models"	Unfinished Business Seminar, NOCS.
56	21 Nov 07	Gattiker	The MUCM Toolkit	NOCS
57	06 Dec 07	Gattiker, Challenor & Woods	"Design for Prediction and Parameter Estimation for Emulation of Computer Experiments"	RSS (Environmental Section), London.
58	06 Dec 07	Maruri-Aguilar & Wynn	"Experimental designs for computer experiments"	RSS (Environmental Section), London.
59	16 Jan 08	Cornford	"Making Sense of a complex world: the role of data and models"	Neural Computing Application Forum, Aston, Birmingham
60	19 Jan 08	Challenor	"Some thoughts on the design of computer experiments"	Seminar, Department of Mathematical Sciences, Durham University
61	22 Jan 08	Goldstein	"Bayesian uncertainty analysis for large scale physical systems"	Invitation III Cycle Romand, Villars sur Ollon
62	30 Jan 08	Rougier	Use of multi model ensembles to estimate the uncertainty due to model structural error	IDAG Spring Meeting, Boulder CO, USA
63	04 Feb 08	Challenor	"Towards the Probability of Rapid Climate Change"	Institute of Advanced Studies, Durham University
64	07 Feb 08	Goldstein	"Uncertainty Analysis for complex physical models: some Bayes linear perspectives"	Simplicity, Complexity and Models meeting, Cambridge
65	13 Feb 08	Maruri-Aguilar & Wynn	"Experimental designs for computer experiments"	RSS (GAS and SSSRI joint meeting on Computer experiments), Southampton University.
66	15 Feb 08	Maruri-Aguilar & Youssef	"Experiments and analysis of computer simulations" (Poster)	LSE, London, UK
67	23 Feb 08	Challenor	"Probability of Rapid Climate Change"	Ustinov Lecture, Durham University
68	27 Feb 08	Gosling	"Elicitation"	Institute of Advanced Studies, Durham University
69	29 Feb 08	Wynn	"Smooth polynomial interpolation with help from theory of point ideals"	Workshop on Applicable Algebra and Computer Science, Logrono, Spain.
70	07 Mar 08	Goldstein	"Forecasting with complex physical models: some Bayes linear perspectives"	Seminar, Newcastle
71	11 Mar 08	Challenor	"Probability of Rapid Climate Change"	Public Lecture, St Mary's College, Durham University
72	13 Mar 08	Goldstein	"Uncertainty analysis for complex physical models "	Seminar, Southampton
73	01 Apr 08	Bastos	"Diagnostics of Gaussian Process Emulators"	Research Students in Statistics Conference, Nottingham
74	01 Apr 08	Stephenson	"Using Derivative Information in the Statistical Analysis of Computer Models"	Research Students in Statistics Conference, Nottingham
75	02 Apr 08	Goldstein	"Systems of experts and systems of models"	Subjective Bayesian Methods Conference, Sheffield
76	14 Apr 08	Rougier	Bayesian palaeoclimate reconstruction	CRISM Meeting on Bayesian Inference for High-Dimensional data, Warwick, UK
77	18 Apr 08	Goldstein	"Uncertainty analysis for complex physical models"	Scottish and Northern Statistics meeting, Durham
78	29 Apr 08	Gosling	"Uncertainty in dynamic simulators"	Department of Mathematics, University of York
79	29 Apr 08	O'Hagan	"Towards quantifying the uncertainty about how much carbon dioxide is absorbed by vegetation"	Scottish group of the Institute of Mathematics and Its Applications, Glasgow
80	01 May 08	Rougier	Using a particle filter to assimilate observation into Saltzman's model of glacial cycles	ICFD One day workshop on Mathematics and Applications of Data Assimilation, Reading, UK
81	May 08	Wilkinson	"Approximate Bayesian Computation: a simulation based approach to inference"	PASCAL Conference on Approximate Inference in Stochastic Processes and Dynamical Systems, Cumberland Lodge, Windsor Park
82	08 May 08	Stephenson	Using Derivative Information in the Statistical Analysis of Computer Models	POETS Seminar, NOCS.
83	14 May 08	O'Hagan	"Towards quantifying the uncertainty about how much carbon dioxide is absorbed by vegetation,"	Royal Statistical Society, Oxford Local Group

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	DATE	MUCM SPEAKER	TITLE	LOCATION
84	20 May 08	Maruri-Aguilar & Wynn	"Generalised design: interpolation and statistical modeling over varieties"	Sestri Levante, Italy
85	Jun 08	Wilkinson	"Bayesian Calibration of Computer Models"	Bridging the gaps meeting on inverse problems, University of Sheffield
86	01 Jun 08	Challenor	"Can we design for smoothing parameters?"	NOCS
87	09 Jun 08	Gosling	"Elicitation and some sensitivity analysis for case study one"	Meeting with GSK, LSE
88	10 Jun 08	Gosling	"Emulation and Calibration"	Bridging the gaps meeting on inverse problems, University of Sheffield
89	16 Jun 08	Wilkinson	"Managing Uncertainty in Climate Models"	Annual Ocean Physics Meeting at the University of East Anglia
90	19 Jun 08	Bastos	"Validation of probabilistic computer model predictions"	Bayesian Postgraduate Seminar Series, Warwick University, UK
91	21 Jun 08	Maruri-Aguilar & Wynn	"Smooth polynomial interpolators"	1st ERCIM, Neuchatel, Switzerland
92	24 Jun 08	Goldstein/ Challenor	"The Bayesian approach to long term climate predication"	RSS meeting on Climate Change, London
93	Jul 08	Bastos	"Diagnostics for Gaussian Process Emulators"	Workshop on Computer Models at Macquarie University in Sydney
94	Jul 08	Bastos	"Diagnostics for Gaussian Process Emulators" (Poster)	ISBA conference, Hamilton Island, Australia
95	Jul 08	Cumming	"Bayes Linear Methods for Multilevel Emulation of Complex Physical Systems" (Poster)	ISBA conference, Hamilton Island, Australia
96	Jul 08	Stephenson	"Using Derivative Information in the Statistical Analysis of Computer Models" (Poster)	ISBA conference, Hamilton Island, Australia
97	Jul 08	Wilkinson	"Calibrating Multivariate Computer Models"	Workshop on Computer Models at Macquarie University in Sydney
98	Jul 08	Vernon	"Bayes Linear Uncertainty Analysis for a Galaxy Evolution Model: Calibrating the Universe" (Poster)	ISBA conference, Hamilton Island, Australia
99	Jul 08	Wilkinson	"Towards the calibration of an intermediate complexity climate model" (Poster)	ISBA conference, Hamilton Island, Australia
100	Jul 08	Wynn	"Junction tubes"	LMS, Durham, UK
101	Jul 08	Wynn	"Junction tubes"	Bernoulli IMS World Congress, Singapore
102	Jul 08	Wynn	"Junction tubes"	Wharton Business School, Pennsylvania, USA
103	Jul 08	Wynn	"A duality theorem for risk aversion and Lorenz-type orderings"	IWOP, Frnace
104	02 Jul 08	Vernon	"Cailbrating stochastic systems biology models"	MUCM dissemination workshop, Durham University
105	02 Jul 08	Challenor	"Yeast Metabolysis"	MUCM dissemination workshop, Durham University
106	02 Jul 08	Goldstein	"General Issues in Uncertainty Analysis for Complex Models"	MUCM dissemination workshop, Durham University
107	02 Jul 08	Gosling	"Speeding up and extending the sensitivity analysis of an epidemiology model"	MUCM dissemination workshop, Durham University
108	02 Jul 08	O'Hagan	"MUCM – An Overview"	MUCM dissemination workshop, Durham University
109	02 Jul 08	Rougier	"Predicting avalanche characteristics by combining model evaluations and experimental results"	MUCM dissemination workshop, Durham University
110	04 Jul 08	Goldstein	"Bayes linear graphical models and computer simulators for complex physical systems"	LMS Durham Research Symposia on "Mathematical Aspects of Graphical Models", Durham
111	14 Jul 08	Goldstein	"Reified Bayesian Analysis for Physical Systems"	7th Congress in Probability and Statistics, Singapore
112	14 Jul 08	Oakley	"Gaussian process emulators for dynamic computer models "	7th Congress in Probability and Statistics, Singapore
113	15 Jul 08	Wynn	"Computer experiments"	Newton Institute, Cambridge, UK
114	23 Jul 08	Maruri-Aguilar & Wynn	"Smooth supersaturated models"	University of Valladolid, Spain
115	06 Aug 08	Oakley	"Decision theoretic sensitivity analysis for complex computer models"	Joint Statistical Meetings, Washington DC
116	15 Aug 08	Maruri-Aguilar & Wynn	"Optimal design for special kernel computer experiments"	DEMA, Newton Institute, Cambridge, UK
117	Sep 08	Vernon	"Calibrating the Universe: An uncertainty analysis for a Galaxy formation simulation"	Invited Talk at RSS 2008 Conference, Nottingham, UK
118	Sep 08	Boukouvalas	"Gaussian process emulation of stochastic models: developments and application to rabies modeling" (Poster)	RSS 2008 Conference, Nottingham, UK
119	Sep 08	Stephenson	"Using derivative information in the statistical analysis of computer models"	RSS 2008 Conference, Nottingham, UK
120	01 Sep 08	Wynn	"Algebraic statistics"	RSS 2008 Conference, Nottingham, UK
121	03 Sep 08	Maruri-Aguilar & Wynn	"Designs for screening in computer experiments"	RSS 2008 Conference, Nottingham, UK
122	07 Sep 08	Cornford	"The role of mechanistic models in Bayesian inference"	Bayesian Research Kitchen, Grasmere, UK
123	15 Sep 08	Maruri-Aguilar & Wynn	"Generalised Designs" (Poster)	SAMSI, RTP, North Carolina, USA
124	25 Sep 08	Cornford	"Structural Model Uncertainty"	PISCES2, Bristol, UK
125	25 Sep 08	Wilkinson	"Emulators: huh? What are they good for?"	PISCES2, Bristol, UK
126	Oct 08	Cumming	"Bayes linear methods for Multiscale emulation of a hydrocarbon reservoir"	Postgraduate Seminar, Mathematical Sciences, Durham, UK
127	02 Oct 08	Wilkinson	"Estimating primate divergence times using conditioned branching processes"	Departmental Seminar, Statistics, Nottingham, UK
128	09 Oct 08	Wilkinson	"Estimating primate divergence times using fossil records"	Departmental Seminar, Probability & Statistics, Sheffield, UK
129	17 Oct 08	Wilkinson	"(Exact) Approximate Bayesian computation"	Departmental Seminar, Neural Computing Research Group, Aston, Birmingham, UK
130	27 Oct 08	Maruri-Aguilar	"Algebraic techniques in design of experiments"	SAMSI RTP, North Carlina USA (remote conference)
131	04 Nov 08	Wilkinson	"Estimating primate divergence times using fossil records"	Departmental Seminar, Field Sciences, Open University, UK

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	DATE	MUCM SPEAKER	TITLE	LOCATION
132	06 Nov 08	Youssef	“Maximum entropy sampling for derivative information”	OPTEX 2008 Heidelberg, Germany
133	17-26/11/08	Maruri-Aguilar & Wynn	“Algebraic statistics”	LSE, UK
134	29 Nov 08	Maruri-Aguilar	“Smooth polynomial interpolators”	5th Sutmn Symposium on Statistical Modelling, Dortmund, TU, Germany
135	Dec 08	Rougier	"Statistical calibration of physical models"	WSL Institute for Snow and Avalanche Research SLF, Davos, Swit
136	Dec 08	Vernon	"Calibrating the Universe: An uncertainty analysis for a Galaxy formatio	Talk at Computer Science Dept, Aston University, UK
137	03 Dec 08	Goldstein	"Bayesian uncertainty analysis for copmlex physical models"	MIDNAG meeting on Uncertainty quantification, University of Nottingham
138	13 Jan 09	Boukouvalas	Heteroscedastic Modelling of Stochastic Computer Codes using Gaussian Process Priors " (Poster)	MUCM Mid Term Review, Sheffield
139	13 Jan 09	Cumming	"Bayes Linear Methods for Multilevel Emulation of Complex Physical Systems ", (Poster)	MUCM Mid Term Review, Sheffield
140	13 Jan 09	House (presented by Vernon)	"Learning about Complex Physical Systems from Multiple Computer Models ", (Poster)	MUCM Mid Term Review, Sheffield
141	13 Jan 09	Maruri-Aguilar	Generalised Designs", (Poster)	MUCM Mid Term Review, Sheffield
142	13 Jan 09	Stephenson	"Using Derivative Information in the Statistical Analysis of Computer Models ", (Poster)	MUCM Mid Term Review, Sheffield
143	13 Jan 09	Vernon	"Calibrating the Universe: Bayes Linear Uncertainty Analysis for a Galaxy Evolution Model ", (Poster)	MUCM Mid Term Review, Sheffield
144	13 Jan 09	Wilkinson	"Towards the calibration of an intermediate complexity climate model", (Poster)	MUCM Mid Term Review, Sheffield
145	13 Jan 09	Youssef/Maruri-Aguilar	"Experiments and analysis of computer simluations ", (Poster)	MUCM Mid Term Review, Sheffield
146	17 Jan 09	Maruri-Aguilar	“Design fan, term orders and zonotopes”	SAMSI RTP, North Carolina, USA
147	Feb 09	Rougier	"Simple models for glacial cycles"	Bath Institute for Complex Systems, UK
148	May 09	Rougier	"The What, Why, and How of Multivariate Emulation"	Spring Research Conference On Statistics in Industry and Technology, Vancouver, Canada
149	Jun 09	Wilkinson	"The Error in ABC"	Paris, France
150	Jun 09	Wilkinson	"The Error in ABC Algorithms" (poster)	BISP6, Bressanone, Italy
151	08 Jun 09	Stephenson	"Using derivative information in the statistical analysis of computer models"	2009 Statistical Sciences Seminar Series, Los Alamos National Lab, NM, USA.
152	10 Jun 09	O'Hagan	"Validating Uncertain Predictions"	MAFELAP, UK
153	12 Jun 09	Goldstein	"The Bayesian approach to uncertainty analysis in complex physiscal models"	JIBA (Joint Inversion with Bayesian Analysis) meeting, Durham, UK
154	Jul 09	Vernon	"Calibrating the Universe: An uncertainty analysis for a Galaxy formation simulation"	Talk at Geophysics Meeting, Durham University, UK
155	Jul 09	Vernon	"Bayes Linear Analysis of Imprecision in Computer Models, with Application to Understanding Computer Models"	Talk at ISIPTA 09 Conference, Durham UK
156	Jul 09	Vernon	"Bayes Linear Emulation of Computer Models"	Talk at SLIM 09 meeting, Manchester, UK
157	08 Jul 09	Adrianakis	"Parameter Estimation for Gaussian Processes"	University of Southampton Theme Day, UK
158	08 Jul 09	Adrianakis	"Toolkit Release 2"	University of Southampton Theme Day, UK
159	10 Jul 09	Challenor	"Estimating risk from a climate model"	Uncertainty in Simulation Models workshop, NOCS, UK
160	10 Jul 09	Cornford	"How to emulate: recipes without patronising (the MUCM Toolkit)"	Uncertainty in Simulation Models workshop, NOCS, UK
161	10 Jul 09	Oakley	"Case Study - sensitivity analysis in epidemiological modelling"	Uncertainty in Simulation Models workshop, NOCS, UK
162	10 Jul 09	O'Hagan	"Introduction: Simulators & Emulators"	Uncertainty in Simulation Models workshop, NOCS, UK
163	10 Jul 09	Vernon	"Calibrating the universe: a Bayesian analysis of a galaxy formation simulation"	Uncertainty in Simulation Models workshop, NOCS, UK
164	23 Jul 09	O'Hagan	"Gaussian process emulation of multiple outputs"	SLIM09, Manchester, UK
165	23 Jul 09	Wilkinson	"Calibrating the UVic climate model using principal component emulation"	SLIM09, Manchester, UK
166	Aug 09	Rougier	"Emulator-based simulator calibration for high-dimensional data"	JSM-2009 Washington DC, USA
167	12 Sep 09	Goldstein	"Bayesian uncertainty analysis for copmlex physical models"	Public Lecture Day, Honouring Kurt Weichselberger on the occasion of his 80th birthday, Munich
168	Oct 09	Rougier	"Introduction to computer experiments, and the challenges of expensive models"	RSS Statistical Computing Section, Bath, UK
169	Oct 09	Rougier	"Quantifying uncertainty in probability of exceedence (PE) curves"	NERC/KTN workshop on Catastrophe modelling for natural hazard impact Lloyd's, London, UK
170	08 Oct 09	Adrianakis	"Non informative prior for correlation lenghts"	University of Sheffield Theme Day, UK
171	08 Oct 09	Pepelyshev	"Nonparametric estimation of series structure and MLE for Gaussian processes"	Parameter Estimation Theme Day, Sheffield, UK
172	12 Oct 09	Cumming	"Small Sample Bayesian Designs for Complex High-Dimensional Models Based on Information Gained Using Fast Approximations"	Seminar, Durham University, UK
173	30 Oct 09	O'Hagan	"Uncertainty in Predictions from Process Models"	Warwick University, UK
174	12 Nov 09	Rougier	"Uncertainty and Risk in Natural Hazards"	Nottingham, UK
175	02 Dec 09	Cornford & Boukouvalas	"Emulation of random output simulators: theory and application"	MRC Biostatistics Unit seminar, Cambridge University, UK
176	19 Jan 10	Fricker	"Testing for Independent Outputs"	MUCM Team Meeting, Sheffield
177	19 Jan 10	Pepelyshev	"Calibration over Unit Cube"	MUCM Team Meeting, Sheffield
178	20 Jan 10	Boukouvalas, Cornford	"Experimental Design for Heteroscedastic Processes"	MUCM Team Meeting, Sheffield

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179	20 Jan 10	Goldstein, Vernon, Seheult	"Assessing Model Adequacy"	MUCM Team Meeting, Sheffield
180	27 Jan 10	Cornford	"Computer says maybe ..."	RSS Meeting on Spatial Uncertainty, FERA, York, UK
181	04 Mar 10	Cornford & Boukouvalas	"Emulation of random output simulators: theory and application"	S3RI , Southampton, UK
182	08 Mar 10	Seheult	"Likelihood methods for computer models of complex physical systems"	Department of Mathematical Sciences, Durham University, UK
183	16 Mar 10	Rougier	Model limitations: Sequential data assimilation with uncertain static parameters	Data-intensive research workshop, Edinburgh
184	22 Mar 10	Rougier	Complex systems: Accounting for model limitations	St Andrews
185	06 Apr 10	Wynn	A review of algebraic statistics	WOGAS 2, University of Warwick
186	06 Apr 10	Wynn / Maruri-	Holes and aberration (poster)	WOGAS 2, University of Warwick
187	12 Apr 10	Rougier	Complex systems: Accounting for model limitations	Research Students' Conference 2010, Warwick
188	14 Apr 10	Wynn / Maruri-Aguillar	Minimal aberration for algebraic models	ECA 2010, Logrogno, La Rioja
189	16 Apr 10	Wynn / Maruri-Aguillar	Connectivity in simplicial models of 2d fractions	ECA 2010, Logrogno, La Rioja
190	03 May 10	Cornford & Barillec	"Emulation for probabilistic weather forecasting"	European Geophysical Union, Vienna , Austria
191	13 May 10	Rougier	"Assessing model limitations"	Governing Through Uncertainty meeting, Bristol
192	24 May 10	O'Hagan, Oakley	Emulating a computationally intensive simulation model of cost-effectiveness	Statistics Society of Canada annual meeting, Quebec City
193	30 May 10	Wynn	Bayesian information-based learning and majorization : Invited Talk	CRISM workshop on “Modeling Uncertainty”
194	31 May 10	O'Hagan	Relating models to reality	CRiSM workshop on model uncertainty, Warwick University
195	03 Jun 10	Cumming	Dimension Reduction for Bayesian Analysis of High-Dimensional	9th Valencia International Mtg on Bayesian Statistics 2010
196	03 Jun 10	Goldstein	External Bayesian analysis for computer simulators	9th Valencia International Mtg on Bayesian Statistics 2010
197	03 Jun 10	Seheult	Likelihood and Bayes Linear Estimation of Model Discrepancy (Poster)	9th Valencia International Mtg on Bayesian Statistics 2010
198	03 Jun 10	Vernon	Visualising the Input Space of a Galaxy Formation Simulation (Poster)	9th Valencia International Mtg on Bayesian Statistics 2010
199	15 Jun 10	Youssef	"Bayesian Sequential Optimal Design of Computer Experiments"	mODa 9, Italy
200	22 Jun 10	Wynn / Maruri-Aguillar	Aberration and Connectivity of Algebraic Models	SIMAI 2010, Cagliari, Sardegna
201	25 Jun 10	Wynn / Maruri-Aguillar	Connectivity of experimental designs using computational commutative algebra	ACA 2010 (Application of Computer Algebra), Vlora, Albania
202	28 Jun 10	Wynn	Monomial ideals in reliability, scan statistics and related methods : Invited Talk	2nd CREST-SBM conference, Osaka. 28 June – 2 July, 2010
203	01 Jul 10	Rougier	"A new statistical framework for analysing multi-model ensembles"	11th IMSC, Edinburgh
204	05 Jul 10	Wynn	Spatially adapted design for computer experiments : Invited Talk	ISBIS 2010, Portoroz, Slovenia
205	08 Jul 10	Wynn / Maruri-Aguillar	Smooth polynomial methods for computer simulations	8th ASMO-UK, Queen Mary University
206	12 Jul 10	Andrianakis	Accounting for the uncertainty in correlation length estimation (Poster)	Uncertainty in Computer Models 2010, Sheffield, UK
207	12 Jul 10	Andrianakis	MUCM Toolkit: the theory and practice of computer model emulation (Poster)	Uncertainty in Computer Models 2010, Sheffield, UK
208	12 Jul 10	Barillec	Emulation and dimension reduction of dynamic simulators	Uncertainty in Computer Models 2010, Sheffield, UK
209	12 Jul 10	Boukouvalas	Experimental design for the emulation of random output simulators (Poster)	Uncertainty in Computer Models 2010, Sheffield, UK
210	12 Jul 10	Challenor	Designing for smoothness	Uncertainty in Computer Models 2010, Sheffield, UK
211	12 Jul 10	Cornford	Emulation and Web Services: A Solution within UncertWeb? (Poster)	Uncertainty in Computer Models 2010, Sheffield, UK
212	12 Jul 10	Cumming	Dimension reduction for Bayesian analysis of high-dimensional computer models using principal variables (Poster)	Uncertainty in Computer Models 2010, Sheffield, UK
213	12 Jul 10	Dolia	How much carbon can we put into the atmosphere and keep global warming to <2°? (Poster)	Uncertainty in Computer Models 2010, Sheffield, UK
214	12 Jul 10	Fricker	Uncertainty analysis of a multiple output computer model (Poster)	Uncertainty in Computer Models 2010, Sheffield, UK
215	12 Jul 10	Pepelyshev	Optimality for designs in computer experiments (Poster)	Uncertainty in Computer Models 2010, Sheffield, UK
216	12 Jul 10	Seheult	Assessing model discrepancy for simulators of complex systems	Uncertainty in Computer Models 2010, Sheffield, UK
217	12 Jul 10	Stephenson	Use of derivative information in the statistical analysis of complex models (Poster)	Uncertainty in Computer Models 2010, Sheffield, UK
218	12 Jul 10	Vernon	Visulaising the Input Space of a Galaxy Formation Simulation	Uncertainty in Computer Models 2010, Sheffield, UK
219	12 Jul 10	Wynn / Maruri-Aguillar	Smooth polynomial methods in the analysis of computer experiments (Poster)	Uncertainty in Computer Models 2010, Sheffield, UK
220	12 Jul 10	Youssef	Application of Karhunen Loeve Expansion in the Design of Computer Experiments (Poster)	Uncertainty in Computer Models 2010, Sheffield, UK
221	20 Jul 10	Cornford & Barillec	"Managing Uncertainty in complex geospatial models"	Spatial Accuracy 2010, Leicester, UK
222	01 Aug 10	Rougier	"A new statistical framework for analysing multi-model ensembles"	IMS 2010, Gothenburg
223	11 Aug 10	Stephenson	Using Derivative Information in the Statistical Analysis of Computer Models	Physical Oceanography & Climate Seminar Series, NOC

ACHIEVEMENTS
PRESENTATIONS and TALKS

	DATE	MUCM SPEAKER	TITLE	LOCATION
224	11 Aug 10	Wynn / Maruri-Aguillar	Smooth polynomial methods for computer simulations	73rd Annual IMS meeting, Goteborg, Sweden
225	01 Sep 10	Vernon	Statistics, Uncertainty and Modelling the Universe	Durham University Open Day
226	03 Sep 10	Vernon, Cumming	Introduction to Bayes Linear Statistics	SIPTA Summer School
227	10 Sep 10	Stephenson	Adjoints without adjoints: emulating model derivatives	Challenger Society for Marine Science, Ocean Modelling Group meeting 2010, NOC
228	12 Sep 10	Wynn	Statistics; the number one discipline for business and industry : Opening Keynote Lecture	ENBIS 10, Antwerp, 12-16 September
229	13 Sep 10	Challenor	Risk, Uncertainty and Computer Models	RSS 2010, Brighton, UK
230	13 Sep 10	Challenor	Designing Computer Experiments	RSS 2010, Brighton, UK
231	13 Sep 10	Challenor, Andrianakis	Building an emulator using ThreadCoreGP	RSS 2010, Brighton, UK
232	13 Sep 10	Challenor, Andrianakis	The MUCM Toolkit and Available Code	RSS 2010, Brighton, UK
233	13 Sep 10	O'Hagan	Simulators & Emulators	RSS 2010, Brighton, UK
234	13 Sep 10	O'Hagan	Sensitivity Analysis	RSS 2010, Brighton, UK
235	13 Sep 10	Vernon	Visulaising the Input Space of a Galaxy Formation Simulation	RSS 2010, Brighton, UK
236	11 Oct 10	Challenor	How to Design a Climate Ensemble	Isaac Newton Institute for Mathematical Sciences, Cambridge
237	15 Oct 10	Challenor	Managing Uncertainty in Complex Models	Trondheim Symposium, Trondheim, Norway
238	06 Dec 10	Challenor	Adventures in Emulation	Isaac Newton Institute for Mathematical Sciences, Cambridge
239	06 Dec 10	Goldstein	"Assessing climate uncertainty: models, meaning and methods"	Isaac Newton Institute for Mathematical Sciences, Cambridge
240	17 Dec 10	Challenor	Obtaining Extremes from Models of Future Climates	ESF-Cost Conference on Extreme Environmental Events, Cambridge
241	20 Jan 11	Goldstein	"Bayesian analysis for complex physical systems modelled by computer simulators"	Seminar, Centre for Reasoning, University of Kent
242	04 Mar 11	O'Hagan	Short Course Session #1: Emulators & MUCM	Mathematical Science of Understanding and Predicting Regional Climate: A School and Workshop, National University of Singapore
243	04 Mar 11	O'Hagan	Short Course Session #2: Building an Emulator using ThreadCoreGP	Mathematical Science of Understanding and Predicting Regional Climate: A School and Workshop, National University of Singapore
244	04 Mar 11	O'Hagan	Short Course Session #3: Options & Generalisations	Mathematical Science of Understanding and Predicting Regional Climate: A School and Workshop, National University of Singapore
245	04 Mar 11	O'Hagan	Short Course Session #4: Using an Emulator	Mathematical Science of Understanding and Predicting Regional Climate: A School and Workshop, National University of Singapore
246	04 Mar 11	O'Hagan	Short Course Session #5: Climate Case Study	Mathematical Science of Understanding and Predicting Regional Climate: A School and Workshop, National University of Singapore
247	07 Mar 11	O'Hagan	Short Course Session: Simulators & Emulators	Mathematical Science of Understanding and Predicting Regional Climate: A School and Workshop, National University of Singapore
248	06 Apr 11	Challenor, Cornford	The Role of Emulation in Managing Uncertainty in Complex Geophysical Models, Short Course Session #1: Emulators & MUCM	European Geosciences Union, General Assembly 2011, Vienna , Austria
249	06 Apr 11	Challenor, Cornford	The Role of Emulation in Managing Uncertainty in Complex Geophysical Models, Short Course Session #2: Building an Emulator	European Geosciences Union, General Assembly 2011, Vienna , Austria
250	06 Apr 11	Challenor, Cornford	The Role of Emulation in Managing Uncertainty in Complex Geophysical Models, Short Course Session #3: Using an Emulator	European Geosciences Union, General Assembly 2011, Vienna , Austria
251	06 Apr 11	Challenor, Cornford	The Role of Emulation in Calibration of Complex Geophysical Models, Short Course Session #4: Calibration	European Geosciences Union, General Assembly 2011, Vienna , Austria
252	06 Apr 11	Challenor, Cornford	The Role of Emulation in Calibration of Complex Geophysical Models, Short Course Session #5: Climate Case Study	European Geosciences Union, General Assembly 2011, Vienna , Austria
253	03 Aug 11	O'Hagan	Elicitation & Uncertainty Quantification	IFIP, Boulder, Colorado
254	03 Aug 11	Goldstein	Bayesian Analysis for Complex Physical Systems Modeled by Computer Simulators: Current Status and Future Challenges	IFIP, Boulder, Colorado

ACHIEVEMENTS
TECHNICAL REPORTS

	MUCM NUMBER	TECHNICAL REPORT SERIES	MILESTONE	STATUS	MUCM AUTHORS
1	07/01	Gosling, J. P. and O'Hagan, A. (2007). Understanding the uncertainty in the biospheric carbon flux for England and Wales. Research Report No. 567/06. Department of Probability and Statistics, The University of Sheffield.		Supporting Document	AOH, JPG
2	07/02	Rougier, J.C., (2007). Lightweight emulators for complex multivariate functions.		Not Submitted	JR
3	07/03	Gosling, J.P. (2006) Differences between estimates of expected computer code output with GEM-SA. Technical Report. Department of Probability and Statistics, The University of Sheffield.		Unpublished	JPG
4	07/04	J.C. Rougier, D.M.H. Sexton, J.M. Murphy, and D. Stainforth (2009), Analysing the climate sensitivity of the HadSM3 climate model using ensembles from different but related experiments. Journal of Climate, 22(13), 3540-3557. DOI:10.1175/2008JCLI2533.1		Published	JR
5	07/05	Simple Conjugate Emulator: Theory and Programming		Not Submitted	JR
6	07/06	Boukouvalas, A., Maniyar, D.M. and Cornford, D. (2007). Dimensionality Reduction in Complex Models. Technical Report No. NCRG/2007/001. Neural Computing Research Group, Aston University		Not Submitted	AB, DM, DC
7	07/07	Bernstein, Y., Maruri-Aguilar, H, Onn, S., Riccomagno, E and Wynn, H.P.. Minimal average degree aberration and the state polytope for experimental designs. Annals of the Institute of Statistical Mathematics (in press). arXiv:0808.3055		Published	HM, HW
8	07/09	Bernstein, Yael; Lee, Jon; Maruri-Aguilar, Hugo; Onn, Shmuel; Riccomagno, Eva; Weismantel, Robert; Wynn, Henry Nonlinear matroid optimization and experimental design. SIAM J. Discrete Math. 22 (2008), 901—919		Published	HM, HW
9	07/10	Maruri-Aguilar, H. and Wynn, H.P. Generalised designs. In: Algebraic and Geometric Methods in Statistics. Cambridge University Press. Eds: Paolo Gibilisco, Eva Riccomagno, Maria Piera Rogantin, and Henry P. Wynn (2009).		Published	HM, HW
10	07/11	Maniyar, D.M., Cornford, D and Boukouvalas A. (2007). Dimensionality reduction in the emulator setting. NCRG/2007/005. Neural Computing Research Group, Aston University.	1.2.2	Unpublished	DM, DC, AB
11	07/12	J.C. Rougier (2008), Efficient Emulators for Multivariate Deterministic Functions, Journal of Computational and Graphical Statistics, 17(4), 827-843. doi:10.1198/106186008X384032.		Published	JR
12	07/13	Wynn, H. (2007). The foundations of learning. MUCM Technical report 07/13, LSE.		Unpublished	HW
13	08/01	Bates, Ron A.; Maruri-Aguilar, Hugo; Wynn, Henry P. Smooth supersaturated models eprint arXiv:0809.4654		To be re-submitted	HM, HW
14	08/02	Bastos, L. S. and O'Hagan, A. (2008). Diagnostics for Gaussian process emulators. Research Report No. 574/07, Department of Probability and Statistics, University of Sheffield. Technometrics 51, 425--438		Published	AOH, LB
15	08/03	Cripps, E., O'Hagan, A., Quaife, T. and Anderson, C. W. (2008). Modelling uncertainty in satellite derived land cover maps. Research Report No. 573/07, Department of Probability and Statistics, University of Sheffield. Submitted to Bayesian Analysis. (January 2008)		Under Revision	AOH
16	08/04	Conti, S., Gosling, J.P., Oakley, J.E. and O'Hagan, A. (2009) Gaussian process emulation of dynamic computer codes. Research Report No. 571/07, Department of Probability and Statistics, University of Sheffield. MUCM Technical Report 08/04. Biometrika. 96, 663-76		Published	JPG, JEO, AOH
17	08/05	Gosling, J. P. (2008). On the elicitation of continuous, symmetric, unimodal distributions. Research Report No. 577/08. Department of Probability and Statistics, The University of Sheffield. MUCM Technical Report 08/05, University of Sheffield		Unpublished	JPG
18	08/06	Boukouvalas, A (2008), Stochastic Emulation, MUCM Technical Report 08/06, Neural Computing Research Group, Aston University	1.1.3	Unpublished	AB
19	08/07	Goldstein, M., House, L., & Rougier, J. (2008) Assessing Model Discrepancy Using a Multi-Model Ensemble. MUCM Technical report 08/07, Durham University & University of Bristol.	2.1.2	Under Review	JR
20	08/08	Boukouvalas, A. and Cornford, D. (2008) Dimension Reduction for Multivariate Emulation. MUCM Technical Report 08/08, Neural Computing Research Group, Aston University.	1.1.4	Not Submitted	AB, DC
21	08/09	Cumming, C. and Goldstein, M. (2008) Bayes Linear Uncertainty Analysis for Oil Reservoirs Based on Multiscale Computer Experiments. MUCM Technical report 08/09, Durham University, Handbook of Applied Bayesian Analysis, eds. A. O'Hagan, M.West	1.3.6	In Publication	JC, MG
22	08/10	Youssef, N. (2008) Towards ASCM Adaptive Sampler For Complex Models. MUCM Technical report 08/10, London School Of Economics	3.1.5	Not Submitted	NY
23	08/11	Maruri-Aguilar, H. and Wynn, H. (2008) Generalised Design. MUCM Technical report 08/11, London School Of Economics		Unpublished	HMA
24	08/12	Gosling, J.P., Maruri-Aguilar, H., Bastos, L., Boukouvalas, A., Conford, D., Van Effelterre, T. and Wynn, H. (2009) Speeding-up and extending the sensitivity analysis of an epidemiological model. MUCM Case Study 1, MUCM Technical Report 08/12, University of Sheffield, published online as part of the MUCM toolkit.		Published	JPG
25	09/01	Wilkinson, R. D. (2009). Bayesian Calibration of Expensive Multivariate Computer Experiments. MUCM Technical Report 09/01, book chapter for Computational Methods for Large-Scale Inverse Problems and Quantification of Uncertainty, pubs John Wiley and Sons 2. To appear in ``Large scale inverse problems and quantification of Uncertainty'', Springer. Editors: B. van Bloemen Waanders and B. Mallick		To appear	RW
26	09/02	Wilkinson, R. D. (2009). Approximate Bayesian Computation (ABC) gives exact results under the assumption of model error. Submitted to Biometrika journal.		Submitted	RW
27	09/03	R.D. Wilkinson and S. Tavare Estimating the primate divergence time using conditioned birth-and-death processes. To appear in Theoretical Population Biology, 2009, doi:10.1016/j.tpb.2009.02.003 .		To appear	RW
28	09/04	Vernon, I. R, and Goldstein, M. (2009). Bayes Linear Analysis of Imprecision in Computer Models, with Application to Understanding Galaxy Formation. MUCM Technical Report 09/04, ISIPTA '09, (with I. Vernon)	2.1.6	Published	IV. MG
29	09/05	Vernon, I. Andrianakis, Y. (2009) Parameter estimation and prediction using Gaussian Processes. MUCM Technical report 09/05	3.2.3	Not Submitted	YA
30	09/06	Boukouvalas, A., Cornford, D., Stehlk, M. (2009) Approximately Optimal Experimental Design for Heteroscedastic Gaussian Process Models. MUCM Technical report 09/06	1.1.6	Not Submitted	AB
31	09/07	Pepelyshev, A., Oakley, J. (2009) On the choice of correlation function and cross-validation for Gaussian processes. MUCM Technical report 09/07	3.3c.2	Unpublished	AP, JEO

ACHIEVEMENTS
TECHNICAL REPORTS

	MUCM NUMBER	TECHNICAL REPORT SERIES	MILESTONE	STATUS	MUCM AUTHORS
32	09/08	Bates, R.A., Maruri-Aguilar, H., Riccomagno, E., Schwabe, R. & Wynn, H. P. (2009) Self-avoiding generating sequences for Fourier lattice designs MUCM Technical report 09/08, London School Of Economics	3.1.11		HMA, HW
33	10/01	Bower, R.G., Vernon, I., Goldstein, M., Benson, A.J., Baugh, C.M., Cole, S., Frenk, C.S. & Lacey, C.G. (2009) The Parameter Space of Galaxy Formation MUCM Technical report 10/01 Resubmitted to MNRAS after responding to referee's comments	2.1.7	Submitted	IV, MG
34	10/02	House, L., Goldstein, M. & Vernon, I.R. (2009) Second Order Exchangeable Emulators to Assess Initial Condition Uncertainty, MUCM Technical report 10/02, Submitted to The Royal Statistics Society, Series B	2.1.3	Submitted	MG, IV
35	10/03	Vernon, I., Goldstein, M. &Bower, R.G. (2009) Galaxy Formation: a Bayesian Uncertainty Analysis. MUCM Technical report 10/03	2.1.8	Unpublished	IV, MG
36	10/04	Goldstein, M., Seheult, A. & Vernon, I. (2010) Assessing Model Adequacy . MUCM Technical report 10/04	2.1.10	Unpublished	IV, MG, AS
37	10/05	Stephenson, G. & Challoner, P. (2010) Adjoints without Adjoint: emulating model derivatives. MUCM Technical report 10/05	3.2b.6	Not Submitted	GS, PC
38	10/06	Fricker, T., Oakley, J. & Urban, N.M. (2010) Multivariate Emulators with Nonseparable Covariance Structures. MUCM Technical report 10/06	2.3.6	To be submitted	TF, JEO
42	10/07	A. Pepelyshev (2010) The role of the nugget term in the Gaussian process method. accepted, MODA 9---Advances in model-oriented design and analysis, Contrib. Statist.	3.3c.2	Published	AP
46	10/08	Fricker, T.E., Oakley, J.E., Sims, N.D. & Worden, K. (2010) Probabilistic uncertainty analysis of an FRF of a structure using a Gaussian process emulator, MUCM Technical report 10/08	2.3.8	Unpublished	TF, JEO
47	10/09	Fricker, T.E. & Oakley, J.E., (2010) Testing for the independence of computer model outputs, MUCM Technical report 10/09	2.3.7	Unpublished	TF, JEO
48	10/10	Vernon, I. & Goldstein, M. (2010) A Bayes Linear Approach to Systems Biology, MUCM Technical Report 10/10	2.1.14	Unpublished	IV, MG
49	10/11	Seheult, A. (2010) Likelihood Methods for Estimating Model Discrepancy, MUCM Technical Report 10/11	2.1.9		AS
50	11/01	O'Hagan, A. (2011) Uncertainty analysis: the variance of the variance, MUCM Technical Report 11/01		Unpublished	AOH
51	11/02	Quantifying simulator discrepancy in discrete-time dynamical simulators, MUCM Technical Report 11/02		To appear	RW, JEO, DC
52	11/03	Andrianakis, Y. & Challenor, P.G. (2011) Parameter estimation for Gaussian process emulators, MUCM Technical Report 11/03		Unpublished	YA, PC
53	11/04	Barillec, R., Ingram, B., Cornford, D. & Csatóc, L. (2011) Projected Sequential Gaussian Processes: A C++ tool for interpolation of large data sets with heterogeneous noise, MUCM Technical Report 11/04			RB, DC

ACHIEVEMENTS
INTERNAL REPORTS

	INTERNAL REPORTS	MILESTONE	DATE	MUCM AUTHORS
1	Pivoting Cholesky Decomposition applied to Emulation and Validation of computer models .	2.2.1	Jun-07	LSB, AOH
2	Statistical Analysis of Computer Models and The Use of Derivative Information : Literature Review	3.2b.1	Sep-07	GS
3	Cumming, J.A., Goldstein, M. Multi-level emulation	1.3.3	Oct-07	JAC, MG
4	Screening strategies for high dimensional input spaces	1.1.1	Oct-07	AB, DC
5	The MUCM case studies: current status and proposals	3.3.2	Dec-07	JPG
6	The MUCM case studies: current status and proposals (final report)	3.3.3	Jan-08	JPG
7	Constraint Manager	3.1.6	Apr-08	HW
8	Manual for C_GOLDSTEIN	3.2b.5	Apr-08	GS
9	Some primary musings on uncertainty and sensitivity analysis for dynamic computer codes	2.3.2	May-08	JPG
10	Kernals & Designs	3.1.4	May-08	HMA, HW
11	A review on Optimal Experimental Design, internal report	3.1		NY
12	Maximum Entropy Sampling by Branch and Bound, Internal Report	3.1		HW, NY
13	Final version of code	3.1.7	Oct-08	NY
14	Emulation of Toy Models with and without derivatives	3.2b.2	Oct-08	GS
15	C_GOLDSTEIN adjoint	3.2b.3	Oct-08	GS
16	Rolls Royce four blade fan assembly: initial results		Oct-08	HMA, HW
17	Application of Reification to a Rainfall-Runoff Computer Model	2.1.4	Feb-09	LH, AS, IV
18	Initial report on the application of derivative methods developed on toy models to C-GOLDSTEIN	3.2b.4	Mar-09	GS
19	Report on the development of the Toolkit	3.2.10	Mar-09	YA, PC
20	Emulation of Dynamic Computer Models with Multivariate Output	1.2.3	Apr-09	RB, AB, DC
21	Log Contrast Multivariate Indicator Cokriging	1.1.5	Apr-09	AB, DC
22	Inference for model error	2.1.5	Jun-09	AS
23	Case Study 3	3.3c.1	Jun-09	AP
24	Galaxy Formation - An uncertainty analysys; Part 1	2.1.8 part	Jul-09	IV, MG
25	Diganostics for Discrepancy Models (draft chapter of thesis)	2.2.6	Oct-09	LB
26	Report on the development of the Toolkit	3.2.16	Oct-09	YA, PC
27	Emulating Multivariate Output with Derivative Information	3.2b.11	Nov-09	GS
28	Case Study 3 - Model Overview & Status	1.3.9	Dec-09	JC
29	Projected Sequential Gaussian Processes: A C++ tool for interpolation of heterogeneous data sets	1.2.5	Jan-10	RB, DC
30	Model Discrepancy in the Saturated Path Hydrology Model: Initial Analysis	2.3.5	Jan-10	TF
31	Thesis	3.2b.8	Jul-10	GS
32	Modular Dynamic Emulation and Internal Model Discrepancy for a Rainfall Runoff Model	2.1.11	Oct-10	IV, AS, MG
33	Uncertainty analysis for cumulative oil production from the Droshky reservoir model		May-11	JAC
34	Uncertainty analysis: the variance of the variance		Jun-11	AOH

ACHIEVEMENTS
OTHER PAPERS and REPORTS

	OTHER PAPERS & REPORTS	TYPE OF OUTPUT	MUCM AUTHORS
1	Williams, B., Higdon, D., Gattiker, J., Moore, L., McKay , M. and Keller-McNulty, S. (2006) Combining Experimental Data and Computer Simulations, With an Application to Flyer Plate Experiments. Journal of Bayesian Analysis 1, Number 4, Sep 28, pp 765--792, DOI:10.1214/06-BA125	Published	JiG
2	Kennedy, M. C., O'Hagan, A., Anderson, C. W., Lomas, M., Woodward, F. I., Heinemeyer, A. and Gosling, J. P. (2006). Quantifying uncertainty in the biospheric carbon flux for England and Wales. Research Report No. 564/06, Department of Probability and Statistics, University of Sheffield. Journal of the Royal Statistical Society A 171, 109--135	Published	AOH JPG
3	Killeya, M. and Goldstein, M., (2007) Exploiting compartmental structure through derivatives in Bayesian emulation of computer simulators with application to the plankton cycle. Under revision for Journal of Statistical Planning and Inference	?	MG
4	Higdon, D., Gattiker, J., Williams, B. and Rightly, M., Computer Model Calibration Using High Dimensional Output (2007). Journal of the American Statistical Association, March 1, 2009, 104(485): 76-87. doi:10.1198/jasa.2009.0005	Published	JiG
5	Goldstein, M. and Rougier, J.C., (2007) Reified Bayesian modelling and inference for physical systems. Journal of Statistical Planning and Inference, to appear with discussion.	Submitted Paper	MG JR
6	Conti, S. and O'Hagan, A. (2007). Bayesian emulation of complex multi-output and dynamic computer models. Research Report No. 569/07, Department of Probability and Statistics, University of Sheffield. Journal of Statistical Planning and Inference 140, 640--651	Published	AOH
7	Bates, R.A., Kenett, R.S., Steinberg, D.M. and Wynn, H.P. (2006). Achieving robust design from computer simulations. Quality Technology & Quantitative Management 3, no. 2, 161--177.	Published	HW
8	Hayter, A. J., Wynn, H. P. and Liu, W., (2006). Slope modified confidence bands for a simple linear regression model. Stat. Methodol. 3, no. 2, 186--192.	Published	HW
9	Pronzato, L., Wynn, H.P. and Zhigljavsky, A.A. (2006). Asymptotic behaviour of a family of gradient algorithms in Rd and Hilbert spaces. Math. Program. 107, no. 3, Ser. A, 409--438	Published	HW
10	Pistone, G. and Wynn, H.P., (2006). Cumulant varieties. Journal of Symbolic Comput. 41, no. 2, 210--221	Published	HW
11	Goldstein, M. and Rougier, J.C. (2006). Bayes Linear Calibrated Prediction for Complex Systems. Journal of the American Statistical Association, 101 (no. 475), 1132-1143	Published	MG JR
12	Perry, M.A., Atherton, M.A., Bates, M. A., Shen, Y. and Wynn, H. P. Bond Graph Based Sensitivity and Uncertainty Analysis Modelling for Micro-Scale Multiphysics Robust Engineering Design. J. Franklin Inst. 345 (2008), 282-292.	Published	HW
13	M A Perry, R A Bates and H P Wynn (2006). A Finite Element Based Formulation for Sensitivity Studies of Piezoelectric Systems. Journal of Smart Materials and Structures. 17 (2008), (7pp).	Published	HW
14	Y Shen, M A Atherton, M A Perry, R A Bates and H P Wynn (2006). Simulation of the Electromechanical Coupling in Multilayered Piezoelectric Distributed Mode Actuator. Journal of Sensors and Actuators (submitted).	Submitted Paper	HW
15	M Perry, R A Bates, M A Atherton, Y Shen and H P Wynn. (2006). Finite Element Sensitivity Studies of Robustness in Micro-Scale Piezoelectric Technologies. In Proceedings of IEE seminar on MEMS Sensors and Actuators, London, UK, 2006.	Published	HW
16	R A Bates, H P Wynn & E S Fraga (2006), An application of lattice-based kernel methods for identifying feasible regions in design space, in I C Parmee (Editor), ``Adaptive Computing in Design and Manufacture - Proceedings of the Seventh International Conference'', The Institute for People-centred Computation (IP-CC), 149-155.	Published	HW
17	A. Giovagnoli, J. Marzialetti, H P Wynn (2006) “An Approach to Inter-rate agreement through Stochastic Orderings: the Discrete Case” Proceedings of XLIII Scientific Meeting of the Italian Statistical Society Torino, 14-16 June 2006, 519-522.	Published	HW
18	H P Wynn (2007). Algebraic solutions to the connectivity problem for m-way layouts. J Statist Plan, Inference 138 (2008), 259-271.	Published	HW
19	Haycroft, R., Pronzato, L., Wynn, H. P. and Zhigljavsky, A. A. Studying convergence of gradient algorithms via optimal experimental design. In : Optimal Design and Related Areas in Statistics. Springer: Optimization and related areas: 28 (2009), 13-37.	Published	HW
	Haycroft, R., Pronzato, L., Wynn, H. OP. and Zhigljavsky, A. A.. Optimal experimental design and quadratic optimization. Tatra Mt. Mtha. Publ. 39, (2008), 115-123.	Published	HW
	Liu, W., Wynn H. P., Hayter, A. J. Statistical inferences for linear regression models when the covariates have functional relationships: polynomial regression. J. Stat. Comp. Sim. (2008), 78, 315-324.	Published	HW
	Giovagnoli, A and Wynn, H. P. Stochastic orderings for discrete random variables. Statistics and Probability letters. (2008), 78, 2827-2835.	Published	HW
	Giovagnoli, A, Marzialetti, J. and Wynn, H. P. A new approach to inter-rater agreement through stochastic orderings: the discrete case. Metrika. 67 (2008), 349-370.	Published	HW
20	Pronzato, L., Wynn, H. P. and Zhigljavsky, A. A. A dynamical system analysis of the optimal s-step gradient algorithm. In : Optimal Design and Related Areas in Statistics. Springer: Optimization and related areas: 28 (2009),39-80	Published	HW
21	Caines, P E., Deardon, R. and Wynn, H. P. Bayes nets of time series. Stochastic realisations and projections. In : Optimal Design and Related Areas in Statistics. Springer: Optimization and related areas: 28 (2009), 155-166.	Published	HW
22	Giovagnoli, A., Marzialetti, J. and Wynn, H. P. Bivariate dependence orderings for uncorrelated categorical variables. In : Optimal Design and Related Areas in Statistics. Springer: Optimization and related areas: 28 (2009), 81-96.	Published	HW
23	J.C.Rougier and D.M.H. Sexton (2007), Inference in Ensemble Experiments, Philosophical Transactions of the Royal Society, Series A, 365, 2133-2143	Published	JR
24	J.C. Rougier, S. Guillas, A. Maute, A.D. Richmond (2009), Expert Knowledge and Multivariate Emulation: The Thermosphere-Ionosphere Electrodynamics General Circulation Model (TIE-GCM), Technometrics, 51(4), 414-424. doi:10.1198/TECH.2009.07123	Published	JR
25	J.C. Rougier and M. Kern (2010), Predicting Snow Velocity in Large Chute Flows Under Different Environmental Conditions. Applied Statistics, forthcoming.	To appear	JCR
26	J.C. Rougier (2008) Formal Bayes Methods for Model Calibration with Uncertainty, in K. Beven and J. Hall (eds), Applied Uncertainty Analysis for Flood Risk Management, Imperial College Press / World Scientific (forthcoming)	Under review	JCR
27	J.C. Rougier (2008) Comment on "Inferring climate system properties using a computer model", Bayesian Analysis 3(1), 45-56	Published	JCR
28	Cumming, J.A. and Goldstein, M. (2009) "Small Sample Bayesian Designs for Complex High-Dimensional Models Based on Information Gained Using Fast Approximations", Technometrics, 51: 4, 377-388.	Published	JAC, MG
29	D.M. Ricciuto, R. Tonkonojenkov, N.M. Urban, R.D. Wilkinson, D. Matthews, K.J. Davis and K. Keller (2008) Assimilation of global carbon cycle observations into an Earth systme model to estimate uncertain terrestrial carbon cycle parameters. Submitted to Global Biogeochemical Cycles. Fulfills milestone 2.3.3	Published	RW
30	P.B. Holden, N.R. Edwards, K.I.C. Oliver, T.M. Lenton and R.D. Wilkinson (2009) A Probabilistic Calibration of Climate Sensitivity in GENIE-1. Climate Dynamics, published online 26th July 2009.	Published	RW
31	J.C. Rougier, S. Guillas, A. Maute, A.D. Richmond (2009), Expert Knowledge and Multivariate Emulation: The Thermosphere-Ionosphere Electrodynamics General Circulation Model (TIE-GCM). Technometrics, forthcoming (November issue). Late draft available as a pdf file.	Published	JCR
32	S. Guillas, J.C. Rougier, A. Maute, A.D. Richmond, and C.D. Linkletter (2009), Bayesian calibration of the Thermosphere-Ionosphere Electrodynamics General Circulation Model (TIE-GCM), Geoscientific Model Development, 2, 137-144.	Published	JCR

ACHIEVEMENTS
OTHER PAPERS and REPORTS

	OTHER PAPERS & REPORTS	TYPE OF OUTPUT	MUCM AUTHORS
33	M. Crucifix and J.C. Rougier (2009), On the use of simple dynamical systems for climate predictions: A Bayesian prediction of the next glacial inception. The European Physics Journal - Special Topics, 174(1), 11-31.	Published	JCR
34	Goldstein, M. and Rougier, J.C., (2009) Reified Bayesian modelling and inference for physical systems. Journal of Statistical Planning and Inference, 139, 1251-1256	Published	MG JCR
35	Maruri-Aguilar, H. & Trandafir, P.C. (2010) Sequential barycentric interpolation (accepted to Proceedings of mODa 9, in press)	To appear	HMA
36	Bates, R.A., Maruri-Aguilar, H., & Wynn, H. P. (2009) Smooth supersaturated models, MUCM technical report 08/01. arXiv:0809.4654 (submitted to Technometrics, in revision)	Under revision	HMA, HW
37	Conti, S., Gosling, J.P., Oakley, J.E. and O'Hagan, A. (2009). Gaussian process emulation of dynamic computer codes. Biometrika 96, 663--676.	Published	AOH
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