

## List of Keynote, Oral, and Poster Presentations

### *List of SAMO-2004 keynote presentations.*

<b>Number</b>	<b>Author</b>	<b>Affiliation</b>	<b>Paper Title</b>
<b>SAMO-04-01</b>	Katherine Campbell	Los Alamos National Laboratory, Los Alamos, New Mexico	Issues in model calibration <sup>(1)</sup>
<b>SAMO-04-02</b>	Roger Cooke	Delft University of Technology, The Netherlands	Probabilistic inversion for input uncertainty <sup>(1)</sup>
<b>SAMO-04-03</b>	Simon French	University of Manchester Manchester, United Kingdom	Quantitative analysis for a decision maker <sup>(1)</sup>
<b>SAMO-04-04</b>	Jon Helton	Sandia National Laboratories, Albuquerque, New Mexico	Sampling-Based Methods for Uncertainty and Sensitivity Analysis
<b>SAMO-04-05</b>	Michael McKay	Los Alamos National Laboratory, Los Alamos, New Mexico	Functional sensitivity analysis <sup>(1)</sup>
<b>SAMO-04-06</b>	Max Morris	Iowa State University, Iowa	Input Screening: Finding the Important Inputs on a Budget
<b>SAMO-04-07</b>	Anthony O'Hagan	University of Sheffield, Sheffield, United Kingdom	Bayesian Analysis of Computer Code Outputs
<b>SAMO-04-08</b>	Andrea Saltelli	Joint Research Centre, Ispra, Italy	Global Sensitivity Analysis: An Introduction
<b>SAMO-04-09</b>	Timothy Trucano	Sandia National Laboratories, Albuquerque, New Mexico	Calibration, Validation, and Sensitivity Analysis: What's What and Who Cares?

<sup>(1)</sup> Title needs to be confirmed by the author, abstract not available.

### *List of SAMO-2004 papers accepted for oral presentations.*

<b>Number</b>	<b>Author(s)</b>	<b>Affiliation(s)</b>	<b>Paper Title</b>
<b>SAMO-04-12</b>	David G. Robinson	Sandia National Laboratories, Albuquerque, New Mexico	Uncertainty Quantification Using Swarm Intelligence
<b>SAMO-04-14</b>	Jack P.C. Kleijnen	Center for Economic Research, Tilburg University, The Netherlands	Design and Analysis of Experiments with Simulation Models: Classic and Novel Methods for Sensitivity Analysis
<b>SAMO-04-15</b>	Alison S. Tomlin	University of Leeds, United Kingdom	The Evaluation of Combustion Mechanisms Using Local and Global Sensitivity and Uncertainty Methods
<b>SAMO-04-20</b>	Paolo Ruffo Livia Bazzana Anna Corradi Andrea Saltelli Stefano Tarantola	E&P Division, ENI, Italy Joint Research Center, Ispra, Italy	Exploration Risk Evaluation Through UASA Techniques
<b>SAMO-04-21</b>	Masato Koda K. Ohmori D. Yokomatsu T. Amemiya	University of Tsukuba, Japan TG Information Network Company, Tokyo, Japan	Stochastic Sensitivity Analysis for Finance
<b>SAMO-04-23</b>	Bernard Krzykacz-Hausmann	Gesellschaft für Anlagen und Reaktorsicherheit, Garching, Germany	Sensitivity Analysis of Monte Carlo Estimates from Computer Models in the Presence of Epistemic and Aleatory

			Uncertainties
<b>SAMO-04-25</b>	Jeremy Oakley	University of Sheffield, Sheffield, United Kingdom	Decision-theoretic Sensitivity Analysis Using Value of Information
<b>SAMO-04-26</b>	Ulrich Callies M. Scharfe	GKSS Research Center, Institute for Coastal Research, Geesthacht, Germany	Local Analysis of Parameter Covariances Resulting From the Calibration of an Over- parameterized Water Quality Model
<b>SAMO-04-30</b>	Carlos Villa Jean-Paul Masy, Flor Castillo, Leigh Thompson, and John Weston	The Dow Chemical Company, Freeport, Texas	Model Validation in Chemical Process with Multiple Steady States
<b>SAMO-04-33</b>	Assem Kanso B. Tassin G. Chebbo	Ecole Nationale des Ponts et Chaussées, Champs sur Marne, France Lebanese University, Beirut, Lebanon	Application of MCMC, GSA Model Calibration Method to Urban Runoff Modeling
<b>SAMO-04-38</b>	Renata Romanowicz Peter Young Keith Beven	Lancaster University, Lancaster, United Kingdom	Comments on GLUE
<b>SAMO-04-39</b>	Stefano Conti Clive W. Anderson Anthony O'Hagan Marc C. Kennedy	University of Sheffield, Sheffield, United Kingdom	A Bayesian Analysis of Complex Dynamic Computer Models
<b>SAMO-04-42</b>	Erik A. Johnson Steve F. Wojtkiewicz	University of Southern California, Los Angeles, California Sandia National Laboratories, Albuquerque, New Mexico	Design of Computer Experiments Using Discrepancy Sensitivity
<b>SAMO-04-45</b>	Jonathan N. Carter P. J. Ballester Z. Tavassoli P. R. King	Imperial College of Science, Technology and Medicine, London, United Kingdom	Our Calibrated Model Has no Predictive Value: An Example From the Petroleum Industry
<b>SAMO-04-49</b>	Charles H. Tong	Lauwrence Livermore National Laboratory, Livermore, California	Experience With a Hierarchical Stratified Sampling Method for Sensitivity Analysis
<b>SAMO-04-50</b>	M. Ratto S. Tarantola A. Saltelli P. Young	Joint Research Centre, Ispra, Italy Lancaster University, Lancaster, United Kingdom	Accelerated Estimation of Sensitivity Indices Using State Dependent Parameter Models
<b>SAMO-04-53</b>	Ioannis Kioutsioukis Stefano Tarantola	Joint Research Centre, Ispra, Italy	Sensitivity Analysis of the e- READINESS Composite Indicator
<b>SAMO-04-57</b>	Brian Rutherford	Sandia National Laboratories, Albuquerque, New Mexico	A Response-Modeling Alternative to Surrogate Models for Support in Computational Analyses
<b>SAMO-04-58</b>	François Hemez	Los Alamos National Laboratory,	The Good, the Bad, and the Ugly

	Yakov Ben-Haim	Los Alamos, New Mexico Israel Institute of Technology, Haifa, Israel	of Predictive Science
<b>SAMO-04-61</b>	Peter H.M. Janssen Arthur C. Petersen Jeroen van der Sluijs	RIVM/MNP, Bilthoven, The Netherlands Copernicus Institute for Sustainable Development and Innovation, Utrecht University, The Netherlands	Towards Guidance in Assessing and Communicating Uncertainties
<b>SAMO-04-63</b>	Vicente Romero	Sandia National Laboratories, Albuquerque, New Mexico	Constraints and Requirements in Model Validation Illustrated Through Development and Characterization of a Component Failure Model
<b>SAMO-04-64</b>	Enrico Zio L. Podofillini	Department of Nuclear Engineering, Polytechnic of Milan, Milan, Italy	A Second-order Differential Importance Measure for Reliability and Risk Applications
<b>SAMO-04-65</b>	T. Burr P. Heasler B. Reid C. Gesh D. Gerlach S. Peterson C. Bayne	Pacific Northwest National Laboratory, Richland, Washington ORNL Los Alamos National Laboratory, Los Alamos, New Mexico	Estimation Procedures and Error Analysis for Inferring the Total Plutonium Produced by a Graphite- moderated Reactor
<b>SAMO-04-66</b>	Jim Hall	Department of Civil Engineering, University of Bristol, Bristol, United Kingdom	Sensitivity Indices for Imprecise Probability Distributions
<b>SAMO-04-68</b>	Scott Ferson	Applied Biomathematics, Setauket, New York	Probability Bounds Analysis is a Global Sensitivity Analysis
<b>SAMO-04-77</b>	Kenneth M. Hanson	Los Alamos National Laboratory, Los Alamos, New Mexico	Inference About the Plastic Behavior of Materials From Experimental Data
<b>SAMO-04-80</b>	Sankaran Mahadevan R. Rebba	Department of Civil and Environmental Engineering, Vanderbilt University, Nashville, Tennessee	Verification and Validation of Simulation Models Under Uncertainty

*List of SAMO-2004 papers accepted for poster presentations.*

<b>Number</b>	<b>Author(s)</b>	<b>Affiliation(s)</b>	<b>Paper Title</b>
<b>SAMO-04-13</b>	Bertrand Iooss Nicolas Devictor François Van Dorpe	Commissariat à l'Énergie Atomique, Cadarache, Saint Paul lez Durance, France	Response Surfaces and Sensitivity Analyses for an Environmental Model of Dose Calculations
<b>SAMO-04-18</b>	Alannah O'Sullivan Mike Christie	Institute of Petroleum Engineering, Edinburgh, United Kingdom	Error Models for Reservoir Simulation
<b>SAMO-04-19</b>	Judit Zádor István Gyula Zsély Tamás Turányi	Department of Physical Chemistry, Eötvös University, Budapest, Hungary	Local and Global Uncertainty Analysis of Complex Chemical Kinetic Systems
<b>SAMO-04-22</b>	Michael Flechsig U. Böhm Th. Nocke	Potsdam Institute for Climate Impact Research, Potsdam, Germany University of Potsdam, Potsdam,	Techniques for Quality Assurance of Models in a Multi-Run Simulation Environment

		Germany University of Rostock, Rostock, Germany	
<b>SAMO-04-27</b>	Suraje Dessai Mike Hulme Kevin Hiscock	University of East Anglia, Norwich, United Kingdom Tyndall Centre for Climate Change Research, United Kingdom	Sensitivity of Groundwater Adaptation Decisions to Uncertainties in Climate Change Scenarios
<b>SAMO-04-28</b>	David Makowski Hervé Monod Marie-Hélène Jeuffroy Cédric Naud Aude Barbottin	Institut National de Recherche Agronomique, INA-PG, Thiverval- Grignon, France Institut National de Recherche Agronomique, Jouy-en-Josas, France	Global Sensitivity Analysis for Calculating the Contribution of Genetic Parameters to the Variance of Crop Model Prediction
<b>SAMO-04-32</b>	Julien Jacques Christian Lavergne Nicolas Devictor	Institut National de Recherche en Informatique et Automatique, Montbonnot Saint Martin, France Commissariat à l'Energie Atomique, Cadarache, Saint Paul lez Durance, France	Impact of Model Uncertainty on Sensitivity Analysis
<b>SAMO-04-34</b>	Scott Ferson	Applied Biomathematics, Setauket, New York	Varying Correlation Coefficients Cannot Account for Uncertainty About Dependence, but There Are Comprehensive Methods to Do So
<b>SAMO-04-37</b>	Bethanna Jackson H. S. Wheeler N. McIntyre P. Whitehead	Imperial College, London, United Kingdom The University of Reading, Reading, United Kingdom	Application of a Markov Chain Monte Carlo Calibration and Uncertainty Framework to a Process-based Integrated Nitrogen Model (INCA)
<b>SAMO-04-40</b>	James Glimm Yunha Lee David Sharp Kenny Ye	State University of New York, Stony Brook, New York Los Alamos National Laboratory, Los Alamos, New Mexico Brookhaven National Laboratory	Error Models of Bayesian Prediction Using Numerical Simulation
<b>SAMO-04-41</b>	Normand R. St- Pierre	The Ohio State University Columbus, Ohio	Validating Mathematical Models of Biological Systems: A Concordance Correlation Coefficient That Incorporate Bias, Scale Shift and Accuracy of Measurements Versus Model Predictions
<b>SAMO-04-44</b>	Pierre Ladevèze G. Puel T. Romeuf	Ecole Nationale Supérieure de Cachan, LMT, Cachan, France EADS Launch Vehicles, Les Mureaux, France	On a Strategy of Reduction of the Lack of Knowledge in Model Validation
<b>SAMO-04-46</b>	Janos G. Hajagos	State University of New York, Stony Brook, New York	Modeling Uncertainty in Population Biology: How the Model is Written Does Matter
<b>SAMO-04-47</b>	José Mira Ricardo Bolado María Jesús Sánchez	E.T.S. de Ingenieros Industriales, Madrid, Spain Joint Research Center, Petten, The Netherlands	Theoretical Results on the Use of Dimensional and Similarity Analyses in the Statistical Analysis of Computer Codes
<b>SAMO-04-52</b>	Francesca Campolongo J. Cariboni	Joint Research Centre, Ispra, Italy	Enhancing Morris' Method

	A. Saltelli		
<b>SAMO-04-62</b>	Vicente Romero John V. Burkardt Max D. Gunzburger Janet S. Peterson	Sandia National Laboratories, Albuquerque, New Mexico School of Computational Science and Information Technology, Florida State University, Tallahassee, Florida	Evaluation of Centroidal Voronoi Tessellation as a Statistical Sampling Method
<b>SAMO-04-67</b>	Carlos Javier Pérez Sánchez Jacinto Martín Jiménez Javier Hernández Santiago	Departamento de Matemáticas, Universidad de Extremadura, Cáceres, Spain	MCMC Sensitivity Estimations
<b>SAMO-04-69</b>	Graeme Manson François Hemez	Department of Mechanical Engineering, University of Sheffield, Sheffield, United Kingdom Los Alamos National Laboratory, Los Alamos, New Mexico	Efficient Interrogation of Uncertainty Space for Enhancing Model Robustness
<b>SAMO-04-71</b>	Shlomo P. Neuman Ming Ye Philip D. Meyer	Department of Hydrology and Water Resources, University of Arizona, Tucson, Arizona Pacific Northwest National Laboratory, Richland, Washington	Accounting for Structural and Parameter Uncertainty Via Maximum Likelihood Bayesian Model Averaging: Theory and Case Study
<b>SAMO-04-72</b>	Jon C. Helton W. L. Oberkampf J. D. Johnson	Sandia National Laboratories, Albuquerque, New Mexico	Sensitivity Analysis in Conjunction With Evidence Theory Representations of Uncertainty
<b>SAMO-04-73</b>	Leslie M. Moore Michael D. McKay	Los Alamos National Laboratory, Los Alamos, New Mexico	Mixed Orthogonal Arrays
<b>SAMO-04-76</b>	Kenneth M. Hanson	Los Alamos National Laboratory, Los Alamos, New Mexico	Halftoning and Quasi-Monte Carlo
<b>SAMO-04-78</b>	Clifford W. Hansen Joshua S. Stein	Sandia National Laboratories, Carlsbad Programs Group, Carlsbad, New Mexico	Uncertainty and Sensitivity Analyses for the Re-certification of the Waste Isolation Pilot Plant
<b>SAMO-04-79</b>	Brian J. Reardon Marius Stan	Los Alamos National Laboratory, Los Alamos, New Mexico	Model Validation Methods for Phase Diagram Determination
<b>SAMO-04-81</b>	Srikanta Mishra Neil E. Deeds	INTERA, Inc., Austin, Texas	Classification Trees: A Data Mining Tool for Improved Sensitivity Analyses of Large- Scale Groundwater Models
<b>SAMO-04-83</b>	Cliff Joslyn Scott Ferson	Los Alamos National Laboratory, Los Alamos, New Mexico Applied Biomathematics, Setauket, New York	Approximate Representations of Random Intervals for Hybrid Uncertainty Quantification in Engineering Modeling
<b>SAMO-04-84</b>	Thomas J. Santner	Department of Statistics, Ohio State University, Columbus, Ohio	Designing Computer Experiments to Determine Robust Control Variables
<b>SAMO-04-86</b>	Michiel J.W. Jansen	Biometris, Wageningen, The Netherlands	ASSA: Algorithms For Stochastic Sensitivity Analysis
<b>SAMO-04-87</b>	Stefano Conti Marc C. Kennedy Clive W.	Department of Probability and Statistics, University of Sheffield, Sheffield, United Kingdom	Case Studies in Gaussian Process Modelling of Computer Codes

	Anderson Anthony O'Hagan		
<b>SAMO-04-88</b>	Jeremy Oakley Anthony O'Hagan	University of Sheffield, Sheffield, United Kingdom	Uncertainty in Prior Elicitations: a Nonparametric Approach