References

- [1] S Atamturktur, J Hegenderfer, B Williams, M Egeberg, R A Lebensohn, and C Unal. Mechanics of Advanced Materials and Structures A Resource Allocation Framework for Experiment-Based Validation of Numerical Models A Resource Allocation Framework for Experiment-Based Validation of Numerical Models. 2017.
- [2] Leonardo S. Bastos and Anthony O'Hagan. Diagnostics for Gaussian Process Emulators. *Technometrics*, 51(4):425–438, nov 2009.
- [3] M. J. Bayarri, J. O. Berger, J. Cafeo, G. Garcia-Donato, F. Liu, J. Palomo, R. J. Parthasarathy, R. Paulo, J. Sacks, and D. Walsh. Computer Model Validation with Functional Output. *The Annals of Statistics*, 35:1874–1906, 2007.
- [4] Maria J Bayarri, James O Berger, Rui Paulo, Jerry Sacks, John A Cafeo, James Cavendish, Chin-Hsu Lin, and Jian Tu. A Framework for Validation of Computer Models. *Technometrics*, 49(2):138–154, may 2007.
- [5] D. Andrew Brown and Sez Atamturktur. Nonparametric Functional Calibration of Computer Models. feb 2016.
- [6] Jenni Brynjarsdóttir and Anthony Ohagan. Learning about physical parameters: The importance of model discrepancy. *Inverse Problems*, 30(11), 2014.
- [7] Siddhartha Chib and Edward Greenberg. Understanding the Metropolis-Hastings Algorithm. *The American Statistician*, 49(4):327, nov 1995.
- [8] Andrew Gelman, John B. Carlin, Hal S. Stern, David B. Dunson, Aki Vehtari, and Donald B. Rubin. *Bayesian data analysis*. CRC Press, London, 3rd edition, 2013.
- [9] Michael Goldstein and Jonathan Rougier. Reified Bayesian modelling and inference for physical systems. Journal of Statistical Planning and Inference, 139(3):1221–1239, mar 2009.
- [10] Robert B Gramacy and Herbert K. H Lee. Bayesian Treed Gaussian Process Models With an Application to Computer Modeling. *Journal of the American Statistical Association*, 103(483):1119–1130, sep 2008.
- [11] Heikki Haario, Eero Saksman, and Johanna Tamminen. Componentwise adaptation for high dimensional MCMC. Computational Statistics, 20(2):265–273, jun 2005.
- [12] Gang Han, Thomas J. Santner, William I. Notz, and Donald L. Bartel. Prediction for Computer Experiments Having Quantitative and Qualitative Input Variables. *Technometrics*, 51(3):278–288, aug 2009.
- [13] Ofir Harari, Derek Bingham, Angela Dean, David Higdon, Corresponding Author, and Dave Higdon. Computer Experiments: Prediction Accuracy, Sample Size and Model Complexity Revisited. Statistica Sinica, 2017.
- [14] Matthew J. Heaton, Abhirup Datta, Andrew Finley, Reinhard Furrer, Rajarshi Guhaniyogi, Florian Gerber, Robert B. Gramacy, Dorit Hammerling, Matthias Katzfuss, Finn Lindgren, Douglas W. Nychka, Furong Sun, and Andrew Zammit-Mangion. Methods for Analyzing Large Spatial Data: A Review and Comparison. oct 2017.
- [15] Dave Higdon, James Gattiker, Brian Williams, and Maria Rightley. Computer Model Calibration Using High-Dimensional Output. *Journal of the American Statistical Association*, 103(482):570–583, jun 2008.
- [16] Dave Higdon, Marc Kennedy, James C. Cavendish, John A. Cafeo, and Robert D. Ryne. Combining Field Data and Computer Simulations for Calibration and Prediction. SIAM Journal on Scientific Computing, 26(2):448–466, jan 2004.

- [17] V. Roshan Joseph and Huan Yan. Engineering-Driven Statistical Adjustment and Calibration. *Technometrics*, 57(2):257–267, apr 2015.
- [18] Georgios Karagiannis, Bledar A. Konomi, and Guang Lin. On the Bayesian calibration of expensive computer models with input dependent parameters. *Spatial Statistics*, aug 2017.
- [19] Marc C. Kennedy and Anthony O'Hagan. Bayesian calibration of computer models. *Journal of the Royal Statistical Society: Series B (Statistical Methodology)*, 63(3):425–464, aug 2001.
- [20] F. Liu, M. J. Bayarri, and J. O. Berger. Modularization in Bayesian analysis, with emphasis on analysis of computer models. *Bayesian Analysis*, 4(1):119–150, mar 2009.
- [21] F. Liu, M.J. Bayarri, J.O. Berger, R. Paulo, and J. Sacks. A Bayesian analysis of the thermal challenge problem. *Computer Methods in Applied Mechanics and Engineering*, 197(29-32):2457–2466, may 2008.
- [22] Jason L. Loeppky, Derek Bingham, and William J. Welch. Computer Model Calibration or Tuning in Practice. *Technometrics*, 2006.
- [23] M. D. McKay, R. J. Beckman, and W. J. Conover. Comparison of Three Methods for Selecting Values of Input Variables in the Analysis of Output from a Computer Code. *Technometrics*, 21(2):239–245, may 1979.
- [24] T Mori and K Tanaka. Average stress in matrix and average elastic energy of materials with misfitting inclusions. *Acta Metallurgica*, 21(5):571–574, may 1973.
- [25] Thomas Muehlenstaedt, Jana Fruth, and Olivier Roustant. Computer experiments with functional inputs and scalar outputs by a norm-based approach. *Statistics and Computing*, 27(4):1083–1097, jul 2017.
- [26] Jeremy E. Oakley and Anthony O'Hagan. Probabilistic sensitivity analysis of complex models: a Bayesian approach. *Journal of the Royal Statistical Society: Series B (Statistical Methodology)*, 66(3):751–769, aug 2004.
- [27] A. O'Hagan. Bayesian analysis of computer code outputs: A tutorial. Reliability Engineering & System Safety, 91(10-11):1290-1300, oct 2006.
- [28] A. O'Hagan and J. F. C. Kingman. Curve Fitting and Optimal Design for Prediction, 1978.
- [29] Rui Paulo, Gonzalo García-Donato, and Jesús Palomo. Calibration of computer models with multivariate output. Computational Statistics and Data Analysis, 56:3959–3974, 2012.
- [30] Peter Z G Qian, C F Jeff, and Wu H Milton Stewart. Bayesian Hierarchical Modeling for Integrating Low-Accuracy and High-Accuracy Experiments. *Technometrics*, 50(2):192–204, 2008.
- [31] Peter Z. G Qian, Huaiqing Wu, and C. F. Jeff Wu. Gaussian Process Models for Computer Experiments With Qualitative and Quantitative Factors. *Technometrics*, 50(3):383–396, aug 2008.
- [32] Jerome Sacks, William J. Welch, Toby J. Mitchell, and Henry P. Wynn. Design and Analysis of Computer Experiments. *Statistical Science*, 4(4):409–423, 1989.
- [33] Thomas J. Santner, Brian J. Williams, and William I. Notz. The Design and Analysis of Computer Experiments. Springer New York, 2003.
- [34] Curtis B. Storlie, William A. Lane, Emily M. Ryan, James R. Gattiker, and David M. Higdon. Calibration of Computational Models With Categorical Parameters and Correlated Outputs via Bayesian Smoothing Spline ANOVA. *Journal of the American Statistical Association*, 110(509):68–82, jan 2015.
- [35] Curtis B. Storlie, Brian J. Reich, Jon C. Helton, Laura P. Swiler, and Cedric J. Sallaberry. Analysis of computationally demanding models with continuous and categorical inputs. *Reliability Engineering & System Safety*, 113:30–41, may 2013.

- [36] Rui Tuo. Adjustments to Computer Models via Projected Kernel Calibration. may 2017.
- [37] Brian Williams, Dave Higdon, Jim Gattiker, Leslie Moore, Michael McKay, and Sallie Keller-McNulty. Combining experimental data and computer simulations, with an application to flyer plate experiments. *Bayesian Analysis*, 1(4):765–792, dec 2006.
- [38] Raymond K. W. Wong, Curtis B. Storlie, and Thomas C. M. Lee. A frequentist approach to computer model calibration. *Journal of the Royal Statistical Society: Series B (Statistical Methodology)*, 79(2):635–648, mar 2017.
- [39] Yulei Zhang and William I. Notz. Computer Experiments with Qualitative and Quantitative Variables: A Review and Reexamination. *Quality Engineering*, 27(1):2–13, jan 2015.
- [40] Qiang Zhou, Peter Z. G. Qian, and Shiyu Zhou. A Simple Approach to Emulation for Computer Models With Qualitative and Quantitative Factors. *Technometrics*, 53(3):266–273, aug 2011.