

## Conference program

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
08:15		Registration				
08:50		Opening by H. Zohm (IPP directorate)				
09:00		Tutorial by A. Caticha: Where do Hamiltonians come from	S. Roberts: Optimization, Quadrature and Inference: pragmatic Bayesianism in practice	J. Skilling: Galilean Monte Carlo	A. Caldwell: Parallelizing MCMC	K. Knuth: Estimating Flight Characteristics of Anomalous Aerial Vehicles
10:00			N. Carrara: On the Estimation of Mutual Information	W. Henderson: TI-Stan: Adaptively annealed thermodynamic integration with HMC	D. Gencaga: Effects of Neuronal Noise on Neural Communication	F. Uribe: Cross-Entropy Method with Failure- informed Dimension Reduction for Rare Event Estimation
10:30		Break and refreshments				
10:50		K.A. Earle: The Spin Echo, Entropy, and Experimental Design	N. Caticha: Entropic dynamics for learning in NN architectures	W. von der Linden: Nested Sampling in Statistical Physics	R. Niven: Bayesian Identification of Dynamical Systems	B.J. Stokes: Some Bayesian Equidistribution Tests
11:20		N.V. Denisova: Bayesian Approach with Entropy Prior for Open Systems	I. Farcas: Multilevel Adaptive Sparse Leja Approximations for Bayesian Inverse Problems	J. Knollmüller: Metric Gaussian Variational Inference	N. Carrara: Quantum Trajectories in Entropic Dynamics	G. Revillon: A complete Classification and Clustering Model to account for continuous and categorical Data in Presence of Missing Values
11:50		R. Leike: Charting nearby galactic dust: a Bayesian 3d non-parametric tomographic reconstruction	Y. Kalaidzidis: Choice of Prior for Deconvolution of Fluorescent Microscopy Images	J. Madrigal Cianci: Infinite Swapping in Bayesian Inverse Problems	S. Ipek: An Entropic Approach to Geometrodynamics	Conference closing and business meeting
12:20		Lunch Break				

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14:00	Welcome Reception with beverages	O. Le Maitre: Surrogate models and reduction methods for UQ and inference in large-scale models	P.S. Koutsourelakis: Physics-aware Deep Learning for High-dimensional Uncertainty Quantification without Labeled Data	A. Mohammad-Djafari: Interaction between Model based Signal and Image processing, Machine Learning and Artificial Intelligence	C. Rodriguez: Learning from Data&Prior	
15:00	Tutorial by R. Bontekoe: Bayes' Theorem, a toolbox for data analysis (four lectures of 45 min)	M. Van Soom: A new approach to the forward measurement problem	S. Ranftl: On the Diagnosis of Aortic Dissection with Impedance Cardiography: A Bayesian Feasibility Study with Multi-Fidelity Simulation Data	J. Stern: Randomness in the Courthouse	A. Caticha: The Information Geometry of space time	
15:30		Break and refreshments			J. Skilling: Against Information Geometry (ends 16:00)	
15:50		M. Trassinelli: An unique prob. Func. For quant. and class. phenomena where distributivity is violated	C. Albert: Gaussian Processes for data fulfilling linear Differential equations	A. Buchholz: Adaptive Tuning Of Hamiltonian Monte Carlo Within Sequential Monte Carlo		
16:20		J. Latz: On the well-posedness of Bayesian inverse problems	Poster session (with Bavarian beverages)	A. Baraov: Electromagnetic induction and relativistic double layer: Mechanism for ball lightning formation		
16:50		Y. Lim: Local Bayesian regularization with entropy prior in an ill-posed inverse problem of emission medical tomography		C. Kauffmann: Inference and Regression in Ramachandran Space: MaxEnt Characterization of the Protein Backbone		
17:20						
17:30					Departure for conference dinner	
22:15					Bus back to Garching	

## Posters

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|----|-----------------|--|
| 1  | S. Cameron      | A Sequential Marginal Likelihood Approximation Using Stochastic Gradients  |
| 2  | C. Chapdelaine  | Variational Bayesian Approach in Model-Based Iterative Reconstruction for 3d X-ray Computed Tomography with Gauss-Markov-Potts Prior |
| 3  | L. Esteves      | Pragmatic hypotheses in the evolution of Science   |
| 4  | H. Graziadei    | Bayesian forecasting overdispersed integer-valued time series  |
| 5  | F. Guglielmetti | Bayesian Reconstruction with Adaptive Image Notion   |
| 6  | W. Henderson    | Empirical algorithm analyses of model comparison methods   |
| 7  | R. Jamodien     | Radial scales in linear model comparison   |
| 8  | K. Knuth        | Distinguishability: The Lesson of the Two Children Problem   |
| 9  | M. Lauretto     | Haphazard Intentional Sampling Techniques in Network Design of Monitoring Stations   |
| 10 | D. Nille        | Deconvolution for events faster than the sampling rate   |
| 11 | A. Mohammadpour | Carpets color detection based on their images  |
| 12 | R. Preuss       | Bayesian determination of parameters for plasma-wall interactions  |
| 13 | H. Takada       | Using entropy to forecast bitcoin's daily conditional value at risk.   |
| 14 | M. Trassinelli  | Nested sampling for atomic physics data: the nested_fit program  |
| 15 | N. Vakili       | Markov Chain Monte Carlo Algorithms For Bayesian 3D Reconstruction In Cryo-Electron Microscopy                                       |