O'Bayes 2022: Objective Bayes Methodology Conference,

Department of Statistics, Baskin School of Engineering, UC Santa Cruz

September 6-10, 2022

Schedule:

All talks will be held in Jack Baskin Auditorium (BE 101), UC Santa Cruz. Poster session, lunches and the welcome reception will be held in the Baskin Engineering courtyard.

Tuesday, 6 September

12:00 – 14:00: **Registration**

Tutorial Session 1 - Chair: Zehang Li (UCSC)

> 14:00 – 15:00: Tutorial #1: *Mark Steel* (University of Warwick): An Introduction to Bayesian Model Averaging

> 15:00 – 16:00: Tutorial #2: *Michele Guindani* (UCI):

16:00 – 16:30: Break

Tutorial Session 2 - Chair: Paul Parker (UCSC)

> 16:30 – 17:30: Tutorial #3: *Omiros Papaspiliopoulos* (Università Bocconi): Scalable Bayesian Computation for Hierarchical Models: Methods and Theory

> 17:30 – 18:30: Tutorial #4: *Subhashis Ghosal* (NCSU): Bayesian Inference in High-Dimensional Models

Wednesday, 7 September

08:00 – 09:00: **Registration**

09.00 – 09.15: **Opening Address**: *Dimitris Fouskakis*, National Technical University of Athens (chair of the scientific committee) & *Bruno Sansó*, UCSC (chair of the local organizing committee)

Session 1 - Chair: Bruno Sansó (UCSC)

09:15 – 10.10: Talk #1: *Leo Held* (University of Zurich): Reverse-Bayes Methods for the Analysis of Replication Studies [discussant: *Luis Pericchi* (University of Puerto Rico)]

10:10 – 11.05: Talk #2: *Brunero Liseo* (Sapienza Università di Roma): An Extension of the Unified Skew-Normal Family of Distributions and Applications to Bayesian Binary Regression (discussant: *Athanasios Kottas* (UCSC)]

11:05 – 11.35: Coffee Break

11:35 – 12.30: Talk #3: *Danielle Durante* (Università Bocconi): The Role of Skew-Symmetric Distributions in Bayesian Inference: Conjugacy, Scalable Approximations and Asymptotics (discussant: *Mengyang Gu* (UCSB)]

12:30 – 14:00: Lunch Break

Session 2 - Chair: Gonzalo García-Donato (Universidad de Castilla-La Mancha)

14:05 – 15.00: Talk #4: *Anabel Forte* (Universitat de València): Screening the Discrepancy Function of a Computer Model [discussant: Marilena Barbieri (Università Roma Tre)]

15:00 – 15.55: Talk #5: *Maria-Eugenia Castellanos* (Universidad Rey Juan Carlos): Model Selection Quantification in Presence of Missing Data [discussant: *Marco Ferreira* (Virginia Tech)]

15:55 – 16.25: Coffee Break

16:25 – 17.20: Talk #6: *Feng Liang* (University of Illinois at Urbana-Champaign): Automatic Relevance Determination with Statistical Guarantees [discussant: *David Draper* (UCSC)]

17:45 – 19:45: Reception and Poster Session

Thursday, 8 September

Session 3 - Chair: Juhee Lee (UCSC)

09:15 – 10.10: Talk #7: *Pierre Alquier* (RIKEN - AIP): Concentration and Robustness of Discrepancy-Based ABC via Rademacher Complexity [discussant: *Anirban Bhattacharya* (Texas A&M University)]

10:10 – 11.05: Talk #8: *Chris Drovandi* (Queensland University of Technology): Bayesian Synthetic Likelihood – Asymptotics and Misspecification [discussant: *Stefano Cabras* (Universidad Carlos III de Madrid)]

11:05 – 11.35: Coffee Break

11:35 – 12.30: Talk #9: *Florence Forbes* (INRIA Grenoble Rhone-Alpes): Automatic Learning of Functional Summary Statistics for Approximate Bayesian Computation [discussant: *Natesh Pillai* (Harvard University)]

12:30 – 14:00: Lunch Break

Session 4 - (Dedicated to Luis Pericchi's Birthday) - Chair: Dimitris Fouskakis (National Technical University of Athens)

14:05 – 15.00: Talk #10: *Jim Berger* (Duke University): Reflections on Intrinsic Priors [discussant *Guido Consonni* (Università Cattolica Milano)]

15:00 – 15.55: Talk #11: *Maria-Eglée Pérez* (University of Puerto Rico): Building Bridges: Bayesian Approaches for Increasing Reproducibility in Null Hypothesis Significance Testing [discussant *Alexander Ly* (University of Amsterdam)]

15:55 – 16.25: Coffee Break

16:25 – 17.20: Talk #12: *Eduardo Gutierrez* (IIMAS, UNAM): Model Selection as Point Estimation [discussant: *Edward George* (University of Pennsylvania)]

17:20 – 18.15: Talk #13: *Abel Rodriguez* (University of Washington): Default Priors and Robust Estimation for Generalized Linear Models [discussant: *Alice Kirichenko* (University of Warwick)]

Friday, 9 September

Session 5 - Chair: Judith Rousseau (University of Oxford)

09:15 – 10.10: Talk #14: *David Rossell* (Universitat Pompeu Fabra): Improper Models for Data Analysis [discussant: *Havard Rue* (King Abdullah University of Science and Technology)]

10:10 – 11.05: Talk #15: *Veronika Rockova* (University of Chicago): Metropolis-Hastings via Classification [discussant: *Andrew Womack* (Indiana University Bloomington)]

11:05 – 11.35: Coffee Break

11:35 – 12.30: Talk #16: *Donatello Telesca* (UCLA): Functional Partial Membership Models [discussant: *Luis Carvalho* (Boston University]

12:30 – 14:00: Lunch Break

Session 6 - Chair: Peter Mueller (University of Texas at Austin)

14:05 – 15.00: Talk #17: *Federico Camerlenghi* (University of Milano-Bicocca): Nested Nonparametric Processes [discussant: *Antonio Canalle* (University of Padova)]

15:00 – 15.55: Talk #18: 16. *Ramsés Mena* (Universidad Nacional Autónoma de México): Exchangeable Random Measures and Stick-Breaking Priors [discussant: *Sinead Williamson* (University of Texas at Austin)]

15:55 – 16.25: Coffee Break

16:30 – 17:30: Meeting of the O'Bayes Section of ISBA (open to everyone)

19:00 – 22:00: Conference Dinner

Saturday, 10 September

Session 7 - Chair: Athanasios Kottas (UCSC)

09:00 – 09.55: Talk #19: *Chris Holmes* (University of Oxford): Predictive Inference: a Path Towards Objectivity? [discussant: *Bertrant Clarke* (UNL)]

09:55 – 10.50: Talk #20: *Clara Grazian* (University of Sidney): Finding Structures in Observations: Consistent(?) Clustering Analysis [discussant: *Julyan Arbel* (Inria Grenoble)]

10:50 – 11.20: Coffee Break

11:20 – 12.15: Talk #21: *Isadora Antoniano-Villalobos* (Università Ca' Foscari): A Multidimensional Objective Prior based on Scoring Rules [discussant: *Stefan Franssen* (Leiden University)]

12:15 – 12:30: **Closing Address:** Members of the scientific and local committee.