VIBASS is the acronym for the València Summer School on Bayesian Statistics that takes place every summer in València (Spain) during the month of July. VIBASS offers an opportunity to be introduced into the Bayesian reasoning without previous knowledge in the subject. It is organised by the research group VABAR (vabar.es) and supported by the Universitat de València (Spain), Universidad de Castilla-La Mancha (Spain), Biomathematics and Statistics Scotland (BioSS, Scotland), and Le Centre de coopération internationale en recherche agronomique pour le développement (CIRAD, France).

VIBASS is structured around three different activities that are carried out in a total of 5 days.

1. The first two days (always Monday and Tuesday) include a basic course on Bayesian learning (12 hours), with conceptual and practical sessions. In the latter we use basic Bayesian R packages so it is recommended that each participant brings his or her own laptop. The instructors of this course are the members of the scientific and organising committee of the VIBASS: Carmen Armero (Chair), David Conesa, Anabel Forte and Miguel Angel Martínez-Beneito from the Universitat de València, Mark Brewer from BioSS, Facundo Muñoz from CIRAD, and Virgilio Gómez-Rubio (who came up with the original idea for the school) from the Universidad de Castilla-La Mancha.

2. The second part includes a two-day (Wednesday and Thursday) 12-hours course dedicated to an issue of current interest in Bayesian research which is generally associated with a statistical package.

3. The last day (Friday) is devoted to the VIBASS Workshop. It includes two plenary sessions with two invited speakers researchers, usually a man and a woman. The VIBASS Workshop ends with a poster session in which participants in the school are encouraged to present their work and share it with the rest of the participants.

To date, we have had five editions of VIBASS. VIBASS1 was in 2017, VIBASS2 in 2018, VIBASS3 in 2019, VIBASS4 in 2021, initially planned for 2020 but postponed to 2021 because of the COVID-19, and VIBASS5 in 2022. Next we present some information about them.

VIBASS1 was held from 17th until 21th July 2017. In this edition the invited course was Bayesian Inference with Stan and was given by Aki Vehtari (Aalto University, Finland).

The invited speakers in the First VIBASS Workshop were Mark Brewer (Bayesian modelling: case studies in ecology and environmental science) from BioSS, and Maria Grazia Pennino (Bayesian Species Distribution Models: an overview) from the Instituto Oceanográfico, Murcia, Spain.

This edition received 26 students coming from Australia, Austria, France, Germany, Spain, and the Netherlands. The total number of posters presented was 10.

VIBASS2 was held from 16th to 20th July 2018. In this edition the invited course was dedicated to structured additive regression models and R package `BayesX`. The course was given by Nadja Klein (University of Melbourne, Australia) and Nikolaus Umlauf (Universität Innsbruck).

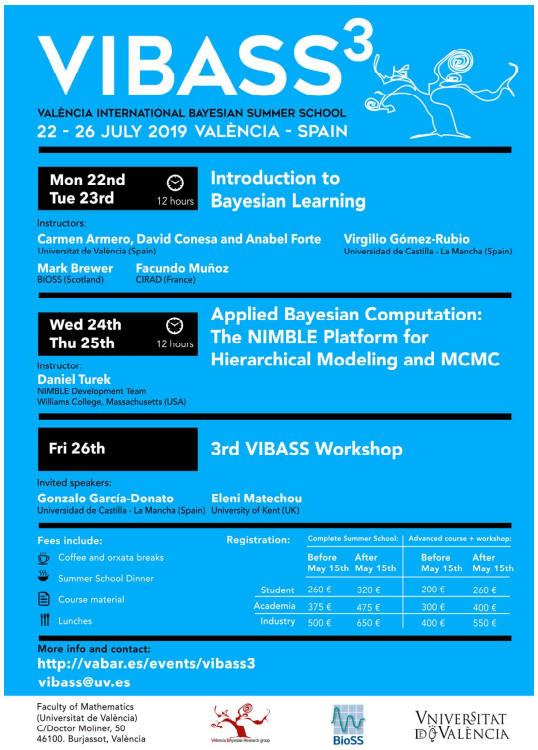
The invited speakers in the Second VIBASS Workshop were Paloma Botella (From Multivariate to Multidimensional Bayesian Disease Mapping) from the Conselleria de Sanitat Universal i Salut Pública de la Generalitat Valenciana, and Luigi Spezia (Markov Switching Models For High-Frequency Time Series From Automatic Monitoring Of Animals) from BioSS.

This edition received 47 students coming from Canada, Cuba, France, Germany, Great Britain, the Netherlands, Portugal, South Africa, Spain, the USA. The total number of posters presented was 17.

VIBASS3 was held from 22th until 26th July 2019. In this edition the invited course was dedicated to NIMBLE. The course, Applied Bayesian Computation: The NIMBLE platform for Hierarchical Modeling and MCMC was provided by Daniel Turek (Williams College, Massachusetts, USA).

The invited speakers and the title of their contribution in the Third VIBASS Workshop were Gonzalo García-Donato (Model Averaging techniques from a Bayesian perspective) from the Universidad de Castilla-La Mancha, Spain) and Eleni Matechu (Bayesian modelling of environmental DNA data) from the University of Kent, UK.

This edition received 37 students (only 35 places officially offered) from Czech Republic, France, Germany, Great Britain, Lebanon, Portugal, Saudi Arabia, Slovenia, Spain, the Netherlands, and the USA. The total number of posters presented was 8.

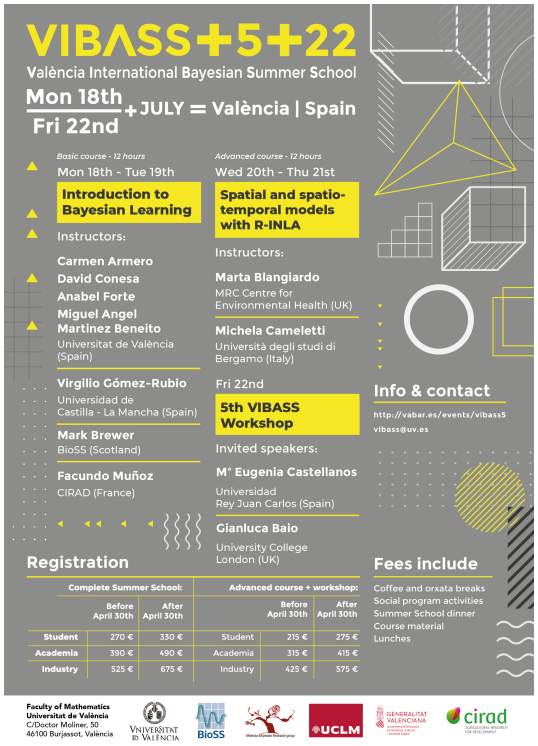


VIBASS4 was held from 12th until 16th July 2021. In this edition the invited course was *Bayesian computation with R-INLA* and it was provided by Håvard Rue and Janet van Niekerk (King Abdullah University of Science and Technology KAUST, Soud Arabia).

The invited speakers in the Fourth VIBASS Workshop were Paula Moraga (Bayesian risk models for tropical disease mapping) from KAUST, and David Rosell (Illustrating the flexibility of Bayesian models: from cancer medicine to political tweets) from the Universitat Pompeu Fabra, Spain.

The teaching of this edition was hybrid (online and onsite) due to the restrictions derived by the covid pandemic. We received 46 students from Argentina, France, Germany, Ireland, Italy, Portugal, Saudi Arabia, Spain, and UK. The student contributions were converted to oral presentations and a total of 13 were presented. The total number of posters presented by the students was 13, some orally.

VIBASS5 was held from 18th until 22th July 2022. In this edition the invited course was *Spatial and spatio-temporal models with the R-INLA package* and it was provided by Marta Blangiardo (Imperial College London, UK) and Michela Cameletti (Università degli studi di Bergamo, Italy).

The invited speakers in the Fifth VIBASS Workshop were María Eugenia Castellanos (p-values, posterior probabilities, and Bayes Factor. Who is who?) from Universidad Rey Juan Carlos, Spain, and Gianluca Baio (Bayesian approaches for addressing missing data in Cost-Effectiveness Analysis (alongside Randomised Controlled Trials) from University College London, UK).

The teaching of this edition was completely onsite. We received 34 students from France, Belgium, Germany, Ireland, Italy, the Netherlands, Norway, Saudi Arabia and Spain. All the student contributions were converted to oral presentations and a total of 10 were presented.