



VAlencia BAyesian Research group

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). In the academic year 2024-25 the Universitat Politècnica de València becomes part of the entities that organise VIBASS. This University will be part of VIBASS8.

VIBASS (From VIBAS1 to VIBASS7) has been 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 (who joined the group in VIBASS 6) 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. David and Anabel left the group at the end of VIBASS 6. The group decided to invite Ruben Amorós (Universitat de València) to take over all the management part from Anabel and also Francisco Palmí (Universitat de València) and Gabriel Calvo (Universitat de València) to help in VIBASS7.
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.

The new edition of VIBASS, VIBASS8, incorporates so many changes that we thought it best to explain them in a specific addendum to this document, which is presented below.

1. Miguel Angel Martínez-Beneito left the group at the end of VIBASS 7. The group decided to invite Elena Lázaro (Universitat de València) and Joaquín Martinez Minaya (Universitat Politècnica de València) to participate in the group. They have accepted. On the other hand, Carmen Armero proposed a change of direction of the course because in the not too distant future she will retire and VIBASS would need continuity. After some discussions, the organisation of the group has been restructured as follows:

Scientific and Organizing committee:

Ruben Amorós (Chair of the Organizing Committee, Universitat de València)
Carmen Armero (Past Chair of the Scientific Committee, Universitat de València)
Mark Brewer (Biomathematics and Statistics Scotland, BioSS)
Gabriel Calvo (Universitat de València)
Virgilio Gómez-Rubio (Universidad Castilla-La Mancha)
Elena Lázaro (Universitat de València)
Joaquín Martínez-Minaya (Universitat Politècnica de València)
Facundo Muñoz (Co-Chair of the Scientific Committee, Cirad, France)
Francisco Palmí (Co-Chair of the Scientific Committee, Universitat de València)

2. The current edition of VIBASS7 is having a lot of funding problems and we are having trouble covering costs. We have decided to eliminate the Friday workshop for future editions because this activity is not the core of the course, it is too expensive to invite two people to give a talk and we would like to keep registration fees affordable to encourage young researchers to attend.

To date, we have had six 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, VIBASS5 in 2022, VIBASS6 in 2023, and VIBASS7 in 2024. VIBASS8 is planned for 7th to 10th of July 2025. Next we present some information about the past editions.

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.

VIBASS 1
Valencia International Bayesian Analysis Summer School
17th -21st July 2017 València (Spain)

Mon 17th	Tue 18th	Introduction to Bayesian Learning ⌚ 12 hours	Instructors: Carmen Armero David Conesa Anabel Forte (Universitat de València, Spain) Virgilio Gómez-Rubio (Universidad de Castilla La-Mancha, Spain)
Wed 19th	Thu 20th	Bayesian Inference with Stan ⌚ 12 hours	Instructor: Aki Vehtari (Aalto University, Finland)
Fri 21st		1st VIBASS Workshop	Invited speakers: Mark Brewer (Biostatistics and Statistics Scotland, UK) Maria Grazia Pennino (Instituto Oceanográfico de Murcia, Spain)
Registration:		Fees include: ☕ Coffee and orxata breaks ₩ Summer School Dinner 📄 Course material 🍴 Lunches	More info: http://vabar.es/events/vibass
Before May 15th	After May 15th		Faculty of Mathematics (Universitat de València) C/ Doctor Moliner, 50 46100 Burjassot, València
Student 260 €	320 €		
Academia 375 €	475 €		
Industry 500 €	650 €		

VIBASS **UNIVERSITAT** **DE** **VALÈNCIA**

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.

VIBASS 2
VALENCIA INTERNATIONAL BAYESIAN SUMMER SCHOOL
16 - 20 JULY 2018
VALÈNCIA - SPAIN

Mon 16th	Tue 17th	Introduction to Bayesian Learning ⌚ 12 hours	Instructors: Carmen Armero David Conesa Anabel Forte Universitat de València, Spain Virgilio Gómez-Rubio Universidad de Castilla La-Mancha, Spain
Wed 18th	Thu 19th	Bayesian Modelling with BayesX ⌚ 12 hours	Invited speakers: Nadja Klein University of Melbourne, Australia Nikolaus Umlauf Universität Innsbruck, Austria
Fri 20th		2nd VIBASS Workshop	Paloma Botella Conselleria de Sanitat Universal i P, València Luigi Spezia Biomathematics & Statistics Scotland, UK
Registration:		Fees include: ☕ Coffee and orxata breaks ₩ Summer School Dinner 📄 Course material 🍴 Lunches	More info: http://vabar.es/events/vibass2
Complete Summer School:		Advanced course + workshop:	
Before May 15th	After May 15th	Before May 15th	After May 15th
Student 260 €	320 €	200 €	260 €
Academia 375 €	475 €	300 €	400 €
Industry 500 €	650 €	400 €	550 €

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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 Matechou (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.

VIBASS³
VALENCIA INTERNATIONAL BAYESIAN SUMMER SCHOOL
22 - 26 JULY 2019 VALENCIA - SPAIN

Mon 22nd Tue 23rd	12 hours	Introduction to Bayesian Learning
Instructors: Carmen Armero, David Conesa and Anabel Forte Universitat de València (Spain) Mark Brewer Facundo Muñoz BIOS (Scotland) CIRAD (France)		
Wed 24th Thu 25th	12 hours	Applied Bayesian Computation: The NIMBLE Platform for Hierarchical Modeling and MCMC
Instructor: Daniel Turek NIMBLE Development Team Williams College, Massachusetts (USA)		
Fri 26th		3rd VIBASS Workshop
Invited speakers: Gonzalo García-Donato Universidad de Castilla - La Mancha (Spain) Eleni Matechou University of Kent (UK)		
Fees include: Coffee and orxata breaks Summer School Dinner Course material Lunches		Registration: Complete Summer School Advanced course + workshop Before May 15th After May 15th Before May 15th After May 15th Student 260 € 320 € 200 € 260 € Academia 375 € 475 € 300 € 400 € Industry 500 € 650 € 400 € 550 €
More info and contact: http://vabar.es/events/vibass3 vibass@uv.es		
Faculty of Mathematics (Universitat de València) C/Doctor Moliner, 50 46100 Burjassot, València		

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, Saudi 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.

VIBASS⁴ 2021
València International Bayesian Summer School
Mon 12th - Fri 16th - July - València - Spain
On-site and on-line options available

Mon 12th - Tue 13th	12 hours	Introduction to Bayesian Learning
Instructors: Carmen Armero David Conesa Anabel Forte Universitat de València (Spain) Virgilio Gómez-Rubio Universidad de Castilla - La Mancha (Spain)		
Wed 14th - Thu 15th	12 hours	Bayesian computing with R-INLA
Instructors: Håvard Rue and Janet Van Niekerk King Abdullah University of Science and Technology (Saudi Arabia)		
Fri 16th		4th VIBASS Workshop
Invited Speakers: Paula Moraga King Abdullah University of Science and Technology (Saudi Arabia) David Rosell Universitat Pompeu Fabra & GSE Barcelona Data Science Center (Spain)		
On-site fees include Coffee and orxata breaks Social program activities Summer School Dinner Course material Lunches		Registration* Complete Summer School: Before May 15th After May 15th Complete Summer School: Before May 15th After May 15th Student 260 € 320 € Student 200 € 240 € Academia 375 € 475 € Academia 300 € 400 € Industry 500 € 650 € Industry 400 € 550 €
*25% discount in all registration fees for online attendees		
+ Info & Contact http://vabar.es/events/vibass4 vibass@uv.es		

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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.



VIBASS+5+22
València International Bayesian Summer School
Mon 18th + JULY = València | Spain
Fri 22nd

Basic course - 12 hours
Mon 18th - Tue 19th
Introduction to Bayesian Learning

Instructors:
Carmen Armero
David Conesa
Anabel Forte
Miguel Angel
Martínez Benito
Universitat de València (Spain)

Advanced course - 12 hours
Wed 20th - Thu 21st
Spatial and spatio-temporal models with R-INLA

Instructors:
Marta Blangiardo
MRC Centre for Environmental Health (UK)
Michela Cameletti
Università degli studi di Bergamo (Italy)

Fri 22nd
5th VIBASS Workshop

Invited speakers:
M' Eugenia Castellanos
Universidad Rey Juan Carlos (Spain)
Gianluca Baio
University College London (UK)

Registration

Complete Summer School:		Advanced course + workshop:		
Before April 30th	After April 30th	Before April 30th	After April 30th	
Student	270 €	330 €	215 €	275 €
Academia	390 €	490 €	315 €	415 €
Industry	525 €	675 €	425 €	575 €

Fees include

- Coffee and orxata breaks
- Social program activities
- Summer School dinner
- Course material
- Lunches

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VIBASS6 was held from 10th until 15th July 2023. In this edition the invited course was *Bayesian capture-recapture inference with hidden Markov models*. and it was provided by Olivier Gimenez (Centre d'Écologie Fonctionnelle & Évolutive, Montpellier, France).

The invited speakers in the Sixth VIBASS Workshop were Audrone Virbickaitė (Construction of flexible distributions using copulas) from CUNEF Universidad, Spain, and Duncan Lee (Modelling spatio-temporal variation in disease risk: Its not all about geographical adjacency) from University of Glasgow, Scotland.

We received 34 students from Brazil, England, France, Italy, Saudi Arabia, Spain, and Portugal. All the student contributions were converted to oral communications and a total of 6 were presented.



VIBASS6
VALENCIA INTERNATIONAL
BAYESIAN SUMMER SCHOOL
July 10 -14 2023

Mon 10th - Tue 11th
Introduction to Bayesian Learning
Basic course - 12 hours

Instructors:
Carmen Armero
David Conesa
Anabel Forte
Miguel Angel
Martínez Benito
Universitat de València (Spain)
Facundo Muñoz
CIRAD (France)

Wed 12th - Thu 13th
Bayesian capture-recapture inference with hidden Markov models
Advanced course - 12 hours

Instructor:
Olivier Gimenez
Centre d'Écologie Fonctionnelle & Évolutive, Montpellier (France)

Fri 14th
6th VIBASS Workshop

Invited speakers:
Concepción Ausín
Universidad Carlos III de Madrid (Spain)
Duncan Lee
University of Glasgow (Scotland)

Registration

Complete Summer School:		Advanced Course + Workshop:		
Before March 30th	After March 30th	Before March 30th	After March 30th	
Student	300 €	350 €	250 €	300 €
Academia	440 €	540 €	365 €	485 €
Industry	600 €	725 €	500 €	625 €

Fees include

- Coffee and orxata breaks
- Summer School dinner
- Course material
- Lunches

Info & contact

http://vabas.es/events/vibass6

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VIBASS7 was held from 8th until 12th July 2024. In this edition the invited course was *Invited course: “Bayesian modelling for economic evaluation of healthcare interventions”* and it was provided by Gianluca Baio (University College London, UK). The invited speakers in the Fifth VIBASS Workshop were Alicia Quirós (Variable selection with missing data for biomedicine) from Universidad de León and Thomas Opitz (An introduction to Bayesian modeling of extreme events) from INRAE (France). The teaching of this edition was completely onsite. We received 27 students. Student contributions were converted to oral presentations and a total of 4 were presented.

VIBASS7

València International Bayesian Summer School

July 8-12 2024

Mon 8th - Tue 9th

INTRODUCTION TO BAYESIAN LEARNING

●○ Basic course ○ 12 hours

Instructors:
Rubén Amorós
Carmen Armario
Carola C. J. Bayarri
Miguel Ángel Martínez Benito
Francisco Palmi-Perales
Universitat de València (Spain)

Wed 10th - Thu 11th

BAYESIAN MODELLING FOR ECONOMIC EVALUATION OF HEALTHCARE INTERVENTIONS

●●● Advanced course ○ 12 hours

Instructor:
Gianluca Baio
University College London (UK)

Fri 12th

7TH VIBASS WORKSHOP

Invited speakers:
Alicia Quirós
Universidad de León (Spain)
Thomas Opitz
INRAE, Avignon (France)

Registration:
Complete Summer School:
Up to April 15th After April 15th
Student 315 € 370 €
Academia 460 € 565 €
Industry 625 € 750 €

Advanced Course + Workshop:
Up to April 15th After April 15th
Student 265 € 320 €
Academia 385 € 490 €
Industry 525 € 650 €

Fees include:
✓ Coffee and tea/cola breaks
✓ Social program activities
✓ Course material
✓ Lunches

Info and contact:
vaber.es/events/vibass7

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