

The R User Conference 2013

The 9th International R User Conference
Albacete, Castilla-La Mancha
July 10-12 2013



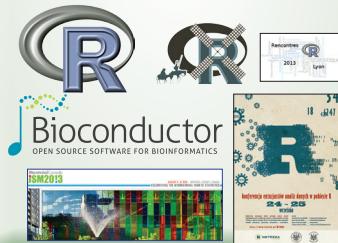
Revolution Analytics Supports the Open Source Community

Supporting 51 Groups Worldwide



Revolution Supported Conferences

BioC2013
Deuxièmes Recontres R
IV JORNADAS
JSM2013
Meielisalp 2013
useR! 2013
WZUR2012



Contributed Software

R PACKAGES

Since its very early days, Revolution Analytics has contributed software to the open source community. Revolution's experts in parallel computing maintain the following packages on CRAN:

doMC, doParallel, doSNOW, foreach, iterators, nws

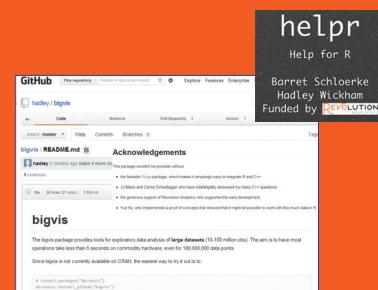


Leading the way for integrating R with Hadoop.

Recognizing early on that the Hadoop project would become very important for R minded data scientists and statisticians for working with big data Revolution initiated the RHA-DOOP project on Github. Today, the three packages rmr (writing map-reduce jobs in R), rbase (queriring the HBASE data base) and rhdfs (working with the HDFS file system) are the gold standards for using R with Hadoop.

Funding R Development

HelpR: <https://github.com/hadley/helpR>



Revolution's Blog

<http://blog.revolutionanalytics.com/>



Tracking Community Events

<http://blog.revolutionanalytics.com/calendar.html>



Community Website

<http://www.inside-r.org/>



R Evangelism in the Media

Forbes

Forbes: <http://bit.ly/r-forbes>

Names You Need to Know in 2011: R Data Analysis Software; Steve McNally, Contributor

The New York Times

New York Times: <http://bit.ly/r-power>

Data Analysts Captivated by R's Power; By ASHLEE VANCE



Revolution Analytics is proud to be a member of The R Foundation
www.revolutionanalytics.com

WELCOME!

In a village of La Mancha, the name of which I have no desire to call to mind, we are hosting the useR! 2013 conference!

Dear useRs,

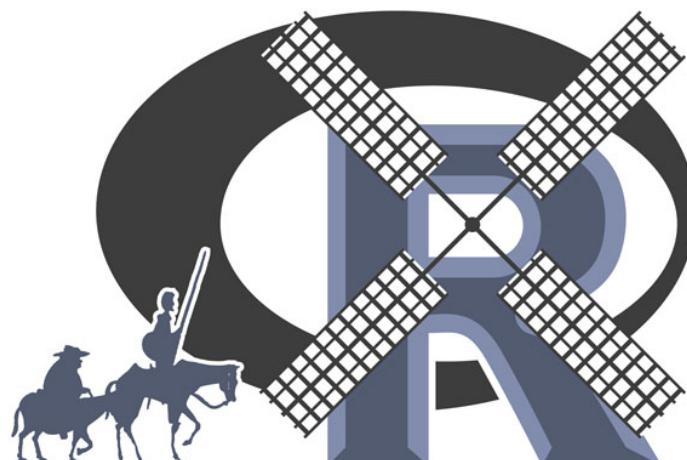
Welcome to the 9th R user conference, useR! 2013, hosted by the University of Castilla-La Mancha in Albacete. Following eight successful meetings, the useR! conference is focused on: R as the ‘lingua franca’ of data analysis and statistical computing; providing a platform for R users to discuss and exchange ideas on how R can be used for statistical computations, data analysis, visualisation and exciting applications in various fields; and giving an overview of the new features of the rapidly evolving R project. The program consists of invited talks discussing new R developments and interesting applications of R, and user-contributed presentations reflecting the wide range of fields in which R is used to analyse data.

The following pages provide you with information regarding the R User Conference, useR! 2013. We hope that you find the conference enjoyable and stimulating, and also hope that you enjoy your time here at the University of Castilla-La Mancha in Albacete.

We would like to thank previous organisers of the useR! conference for their help and advice. In particular, the help of Heather Turner and Matt Shotwell (who have organised the useR! conference in Warwick and Nashville, respectively). They have provided us with materials and tips to make an even better useR! conference.

With kind regards from the useR! 2013 Organising Committee.

Esteban Alfaro-Cortés	José Luis Alfaro-Navarro
María Teresa Alonso-Martínez	Gonzalo García-Donato
Matías Gámez-Martínez	Noelia García-Rubio
Virgilio Gómez-Rubio (Chair)	María José Haro-Delgado
Emilio L. Cano	Francisco Parreño-Torres



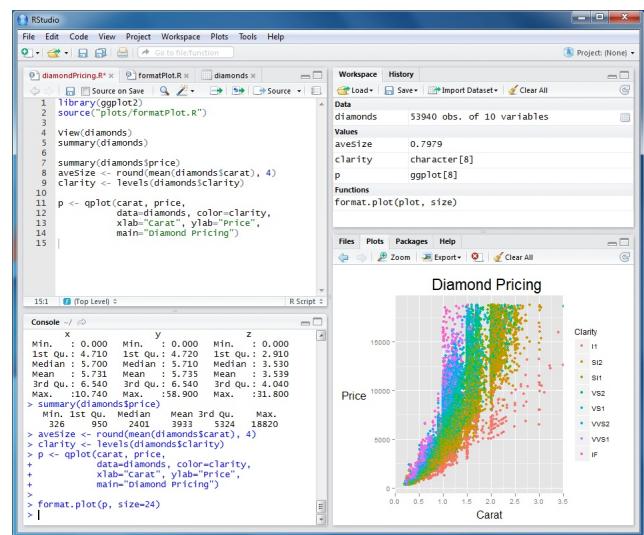


Software, education, and services for the R community

RStudio IDE

Take control of your R code

The RStudio IDE is a powerful and productive user interface for R. It's free and open source, and works great on Windows, Mac and Linux. It even runs in a browser with RStudio Server.



Shiny

Shiny makes it super simple for R users to turn analyses into interactive web applications anyone can use.

ggplot2

An enhanced data visualization package for R. Create stunning multi-layered graphics with ease.

Rpubs

RPubs is a free publishing service for R Markdown, which weaves together your writing and the output of your R code.

plyr

An R package for efficiently manipulating data. Utilize the split, apply, combine method for fast, consistent results.

devtools

Developer tools for building R packages. Remove the pains and bottlenecks of package development.

Training *Harness the power of R*

We've got hands-on courses for beginners and even R experts. We'll teach you practical skills you can immediately put to use. Our instructors are available for on-site training, or you can join us at one of our public workshops. Our course catalogue includes: Intro to data science with R, Effective data visualization, Modelling and machine learning, Reports and reproducible research, and Advanced R programming.

BEGINNER

INTERMEDIATE

ADVANCED

CUSTOM

<http://www.rstudio.com>



Oracle Corporation is proud to sponsor useR! 2013

R for the Enterprise

While many developers and analysts run R programs on their personal computers, sometimes they need more. Oracle has created a broad set of options for using R on data stored in Hadoop or Oracle Database, bringing enterprise caliber capabilities to projects that require high levels of security, scalability and performance. Develop and operationalize R scripts for analytical applications simply and easily—SQL and MapReduce knowledge optional!

For more information, visit oracle.com/goto/R

Please make sure to stop by our booth, to not only network with our Product Experts, but also get an onsite demonstration.

Unleash the agility of R for the Enterprise

with TIBCO Enterprise Runtime for R (TERR)

TIBCO Enterprise Runtime for R (TERR) is an enterprise-grade analytic engine that TIBCO has built from the ground up to be fully compatible with the R language, leveraging our long-time expertise in the closely related S+ analytic engine.

TIBCO Spotfire and TIBCO Enterprise Runtime for R enable you to:

- Leverage a Predictive Analytics Ecosystem through seamless integration of your existing investments in R, S+, SAS® and MATLAB®
- Embed the enterprise-class, R-compatible TIBCO Enterprise Runtime for R engine

TIBCO Spotfire is proud to sponsor the useR! Conference, as part of our ongoing support for the vibrant R Community.

For more information on Spotfire Predictive Analytics and TERR, and to try the free TERR Developer's Edition, visit spotfire.tibco.com.



Contact us: **TIBCO Spotfire**, mds@tibco.com - +44-800-520-0443

PROGRAMME OVERVIEW

Tuesday 9th July

08:30 Registration Opens¹
09:30 - 13:00 Morning Tutorials
13:00 - 14:30 Lunch²
14:30 - 18:00 Afternoon Tutorials
20:00 - 23:00 Opening Mixer³, sponsored by the Faculty of Economics and Business Sciences, UCLM

Wednesday 10th July

09:00 - 09:30 Opening Session
09:30 - 10:25 Invited Talk - Håvard Rue
10:30 - 11:50 Contributed talks
11:50 - 12:20 Tapas Break, sponsored by Revolution Analytics
12:20 - 13:40 Contributed Talks
13:40 - 15:30 Lunch
15:30 - 16:25 Invited Talk - Hadley Wickham
16:30 - 17:50 Contributed Talks
17:50 - 20:00 Tapas Cocktail and Poster Session, sponsored by Google

Thursday 11th July

09:00 - 09:55 Invited Talk - Duncan Murdoch
10:00 - 11:20 Contributed Talks
11:20 - 11:50 Tapas Break, sponsored by Oracle
11:50 - 13:10 Contributed Talks
13:10 - 15:00 Lunch
15:00 - 15:55 Invited Talk - José Manuel Benítez-Sánchez
16:00 - 16:25 useR! 2013 Awards
16:30 - 17:50 Contributed Talks
17:50 - 18:20 Tapas Break, sponsored by R-Studio
18:20 - 19:40 Contributed Talks
21:30 - 00:00 Conference Dinner⁴, sponsored by Revolution Analytics

Friday 12th July

09:00 - 09:55 Invited Talk - Steve Scott
10:00 - 11:20 Contributed Talks
11:20 - 11:50 Tapas Break, sponsored by TIBCO
11:50 - 13:10 Contributed Talks
13:10 - 13:30 Closing Remarks
13:30 - 15:00 Lunch/Paella, sponsored by the Dep. of Mathematics, UCLM

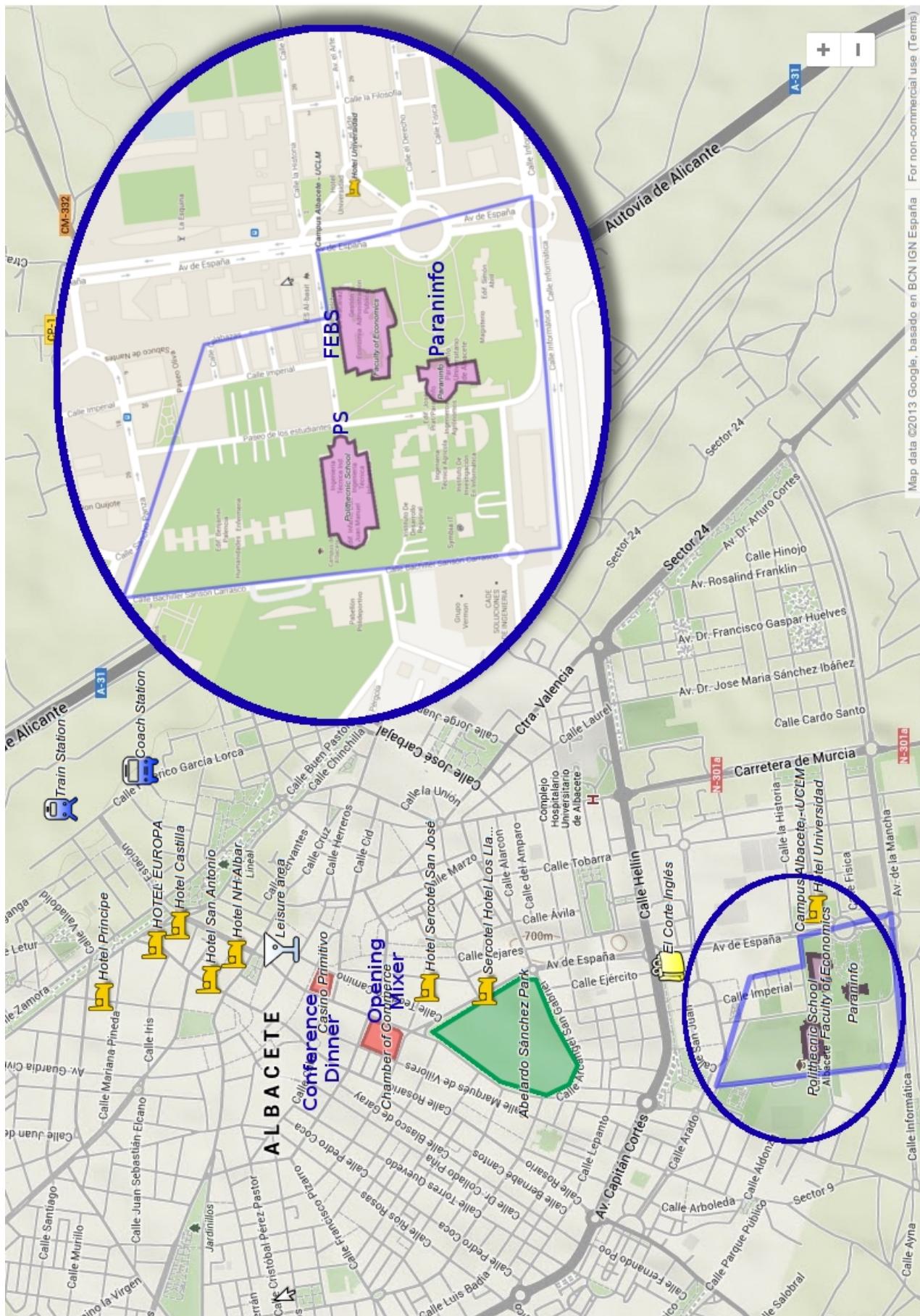
¹the registration desk will be located in the main hall of the Faculty of Economics

²lunch on Tuesday will only be provided for attendees registered for the tutorials

³admission will require to show your conference badge

⁴admission to the Conference Dinner will be via ticket only

Map of Albacete



University of Castilla-La Mancha in Albacete



TRAVEL INFORMATION

Venue

The conference takes place in the

Albacete Campus,
University of Castilla-La Mancha,
Avda. España s/n,
02071 Albacete,
Spain

Tutorials will be held in the Polytechnic School (PS, building no. **4** in the campus map on page **8**), plenary sessions will take place in the “Paraninfo” (building no. **3**) and contributed sessions will be presented in the Faculty of Economics and Business Sciences (FEBS, building no. **1**)

Travelling to the University of Castilla-La Mancha in Albacete

Information on getting to the University from main airports and different nearby cities is provided in the conference website at <http://www.edii.uclm.es/~useR-2013/#Travel>. Albacete can be conveniently reached by bus and train from Alicante, Madrid, Murcia and Valencia.

Parking

Complimentary car parking is available in the allocated car parks on campus. If the parking in front of the Faculty of Economics and Business Sciences is full you will probably find some places in the parking by the Polytechnic School. Parking lots can be easily located while driving on campus. Disabled parking spaces are available close to the entrance of main buildings.

Bus

There are a number of bus lines that will take you from the city centre to the campus. Bus line A (*Línea A*) stops in the city centre and has another stop close to the Faculty of Economics and Business Sciences. Bus line C (*Línea C*) will take a different route from the city centre until the university campus. Tickets can be purchased on the bus at a cost of €1.20. Bus stops are shown at the top in the campus map on page **8** (next to the bicycle symbol).

GENERAL INFORMATION

Conference registration

Registration for the conference will take place in the hall of the Faculty of Economics and Business Sciences (FEBS, building no. 1). The registration desk will be available during the whole duration of the conference. The staff at the registration desk will be happy to provide any assistance and information to participants.

Internet access

If you have a WiFi enabled laptop you may access basic internet services by connecting to the “uclm_eventos” wireless network. You will need to enter a username and password which will be given to you when you register for the conference. Participants from academic institutions will be able to use the “eduroam” wireless network.

A free access computer room will be open in the first floor of the Polytechnic School from Tuesday morning to Friday afternoon. This room is labelled as *Libre Acceso* in the map on page 14 (top-right). Note that this is an open access room and that it is open to the general public.

Meals

During tutorials, tapas breaks will be provided on the ground floor of the Polytechnic School. Lunch will be served in the hall of the Faculty of Economics and Business Sciences. During the conference, tapas breaks and lunches will be provided in the hall of the Faculty of Economics and Business Sciences.

The Opening Mixer (Tuesday) will be held in the gardens of the Chamber of Commerce (see map on page 7). The Tapas Cocktail and Poster Session (Wednesday) will take place in the hall of Faculty of Economics and Business Sciences. Beer, wine, non-alcoholic drinks and light snacks will be served at both events.

The conference dinner will take place on Thursday in the restaurant “Casino Primitivo”, which is conveniently located in the city centre. See map on page 7.

Other options for meals are snacks include the “cafeterias” on the basement of the Polytechnic School and the first floor of the Faculty of Economics and Business Sciences. There are a number of bars and restaurants by the campus which provide different types of food (including tapas, of course) and drinks.

Messages

The telephone number of porter’s lodge in the Faculty of Economics and Business Science is (+34) 967 59 92 00, Ext. 2105. This telephone number can be used to be contacted in case of an emergency.

Smoking Policy

Smoking is forbidden anywhere in University buildings, including bar areas. Furthermore, smoking is not permitted outside buildings if the smoke is likely to drift through open doors or windows, or inconvenience people entering or leaving the building.

PROGRAM COMMITTEE AND CONFERENCE SPONSORS

Program Committee

Esteban Alfaro-Cortés (Chair)	Michela Cameletti
Ramón Diaz-Uriarte	Noelia García-Rubio (Chair)
Gregor Gorjanc	Søren Højsgaard
Max Kuhn	John Maindonald
Brian Peterson	Barry Rowlingson
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Conference Sponsors

Support from our sponsors is gratefully acknowledged.

Conference sponsors

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Faculty of Economics and Business Sciences, UCLM
Google
Open Analytics
Oracle
Revolution Analytics
RStudio
School of Industrial Engineering, UCLM
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Sponsors of the bursary scheme and/or scholarships

Google
John Wiley & Sons
Open Analytics
Revolution Analytics
RStudio
TIBCO

Exhibitors

Revolution Analytics and RStudio will be exhibiting in the hall of the Faculty of Economics and Business Sciences. The publishers John Wiley & Sons, Springer and Taylor and Francis will be exhibiting as well.

MEDICAL AND EMERGENCY INFORMATION

Medical assistance

There is not a Health Clinic on campus, but there is a hospital close to the main campus, as shown in the map on page [7](#). Visitors in need of emergency assistance can dial (free of charge) the national emergency line at 112.

Emergency services and fire procedures

Revisar

For help in an emergency dial 112. Visitors are asked to familiarise themselves with the University's fire procedures which are displayed in the university buildings.

On discovering a fire in a building:

Raise the alarm by breaking the glass in the nearest *Break Glass* point.

On hearing the fire alarm:

Stop what you are doing.

Leave by the nearest Fire Exit.

Walk calmly, do not run.

Do not stop to collect personal belongings.

Make your way to the nearest evacuation point, standing well clear of the building.

Do not re-enter the building until told to do so by the Fire Service or University Security Staff.

Reporting incidents

In the event of an accident or other incident occurring on University premises, please report immediately to the porter's lodge (Ext. 2105) who will then take appropriate action.

TUTORIALS

Tuesday 9th July

Participants are welcome to arrive at 08:30 for registration in the Faculty of Economics and Business Sciences. The morning tutorials will be held from 09:30 - 13:00, with a break for coffee at 11:00 - 11:30. Lunch (provided for all tutorial participants) is scheduled for 13:00 - 14:30. The afternoon tutorials will be held from 14:30 - 18:00, with a break for coffee at 16:00 - 16:30.

Morning Tutorials

- ▷ **Esteban Alfaro, Matías Gámez and Noelia García:** Classification with Individual and Ensemble Trees
- ▷ **Jason Bryer and Robert Pruzek:** Introduction to Propensity Score Methods with R
- ▷ **Romain François and Hadley Wickham:** C++ and Rcpp for beginners
- ▷ **Markus Gesmann and Diego de Castillo:** Interactive web graphics with R and googleVis
- ▷ **Stephanie A. Kovalchik:** Performing Meta-Analysis with R
- ▷ **Mark van der Loo and Edwin de Jonge:** An introduction to data cleaning with R
- ▷ **Martin Morgan:** R/Bioconductor for Analysis and Comprehension of High-throughput Genomic Data
- ▷ **George Ostrouchov and Drew Schmidt:** Programming with Big Data in R
- ▷ **Xavier de Pedro:** Web 2.0 interfaces for R with Tiki
- ▷ **Havard Rue:** Bayesian computing with INLA: An introduction
- ▷ **Garrett Grolemund:** Data visualization with ggplot2

Afternoon Tutorials

- ▷ **Roger Bivand:** Using Spatial Data
- ▷ **Karim Chine:** R and Cloud Computing for Higher Education and Research
- ▷ **Andrea Dessi, Enrico Branca, Federico Figus:** Applied Financial Analysis and Human Capital Risk Management
- ▷ **Marco Scutari:** Learning Bayesian Networks in R: an Example in Systems Biology
- ▷ **Max Kuhn:** Predictive Modeling with R and the caret Package
- ▷ **Rui Paulo and Jesús Palomo:** Statistical Analysis of Computer Models using R
- ▷ **Josh Paulson and Joe Cheng:** Developing web applications with R and shiny
- ▷ **Pete Philipson:** Joint Modelling of Repeated Measurements and Time-to-Event Data
- ▷ **Andy South:** Making beautiful world maps with country-referenced data using rworldmap and other R packages
- ▷ **Tobias Verbeke and StephanWahlbrink:** Eclipse/StatET and Architect for Professional R Development
- ▷ **Alex Zolotovitski:** How to work with large R projects

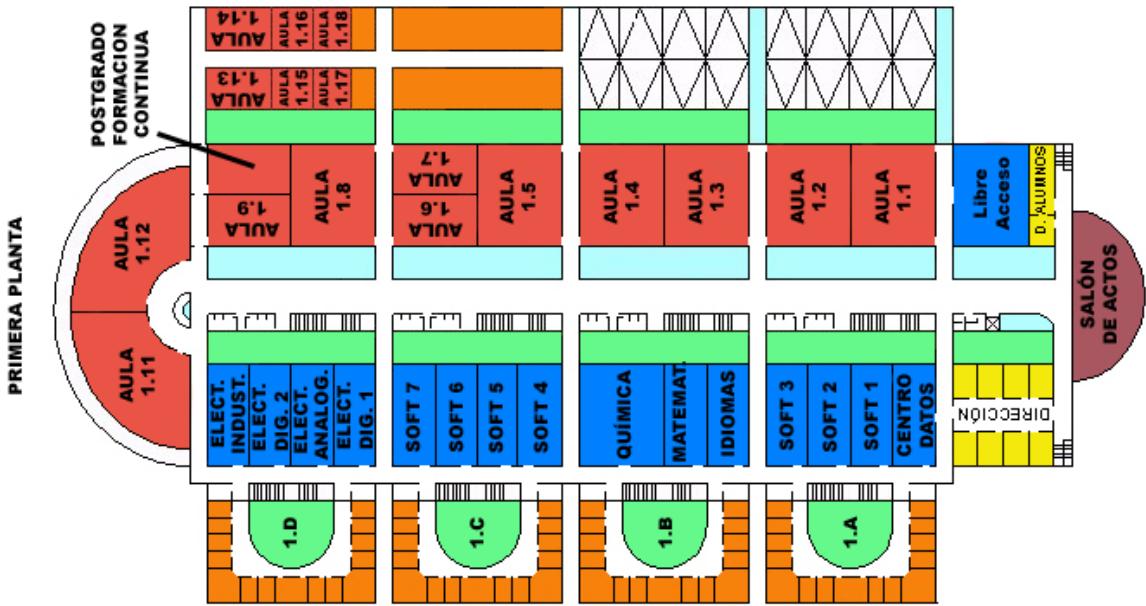
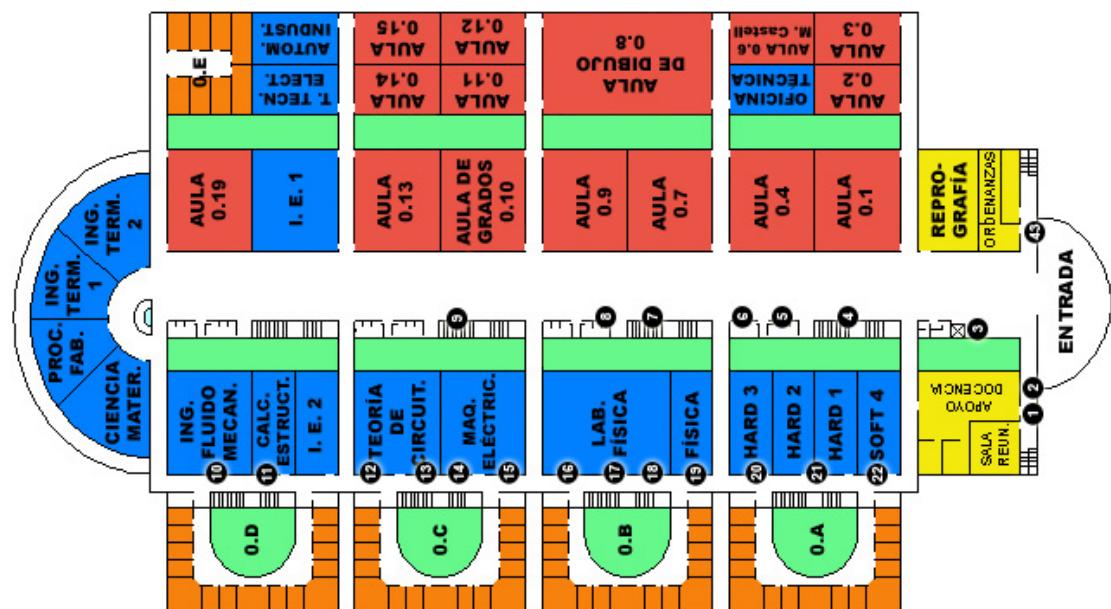
Opening Mixer

All conference attendees are welcome to join us for drinks at the gardens of the Chamber of Commerce in the city centre (see location in the map on page 7), 20:00 - 23:00. Beer, wine, non-alcoholic drinks, tapas and light snacks will be available for all attendees.

Polytechnic School, Albacete, University of Castilla-La Mancha.

Ground Floor

First Floor



CONFERENCE TIMETABLE

Wednesday 10th July

	09:00	Opening Session, Paraninfo
	09:30	Invited Talk, Paraninfo, Chair: Gonzalo García-Donato Håvard Rue Bayesian computing with INLA and the R-INLA package
	10:30	Bioinformatics, FEBS 1, Chair: Ramón Díaz-Uriarte Hugh Shanahan Integrating R with a Platform as a Service cloud computing platform for Bioinformatics applications. Inma Tur Simulation of molecular regulatory networks with graphical models Raivo Kolde GOsummaries: an R package for showing Gene Ontology enrichment results in the context of experimental data Laure Cougaud Analysis of qPCR data in R
		Computational Challenges in Molecular Biology I, FEBS 2, Chair: Tobias Verbeke Yury Aulchenko The GenABEL suite for genome-wide association analyses Thomas Poulsen Making enzymes with R Filippo Biscarini Use of molecular markers to estimate genomic relationships and marker effects: computation strategies in R Insa Winzenborg High Content Screening Analysis in R
Focus I		Environmental statistics I, FEBS 9, Chair: Andy South Jean-Michel Perraud rClr package - low level access to .NET code from R María Victoria Reproducible Research in Ecology with R: distribution of threatened mammals in Equatorial Guinea. Jiménez Franco Jiří Kadlec Using R for Mapping the Spatial Extent of Meteorological and Hydrological Drought Events
		Statistics/Biostatistics I, FEBS 10, Chair: Stephanie Kovalchik Yuri Posokhov Three-component decomposition of coal spectrum in R Konstantin Chizhov Method of comparison of actions of the liquidators of the accident on Chernobyl Nuclear Power Plant on the basis of fragmentation of their routes and encryption it in a form similar to the DNA Leonardo Collado Differential expression analysis of RNA-seq data at base-pair resolution in multiple biological replicates Torres Jan Graffelman Statistical inference for Hardy-Weinberg equilibrium with missing data
	11:50	Tapas Break, sponsored by Revolution Analytics
	12:20	Econometric Software, FEBS 1, Chair: Achim Zeileis R. Scott Hacker Hansel: A Deducer Plug-In for Econometrics Giovanni Millo Robust standard errors for panel data: a general framework Christoph Bergmeir Rsiopred: An R package for forecasting by exponential smoothing with model selection by a fuzzy multicriteria approach Genaro Sucarrat AutoSEARCH: Automated General-to-Specific Model Selection
		Computational Challenges in Molecular Biology II, FEBS 2, Chair: Hugh Shanahan Adi Tarca What did we learn from the IMPROVER Diagnostic Signature Challenge? Tal Galili Deciphering the tRNA operational code - using R Andreas Leha Big Data and Reproducibility – Building the Bridge Robert Ness Topology-based Hypothesis Generation on Causal Biological Networks using igraph
Focus II		Environmental statistics II, FEBS 9, Chair: Roger Bivand Alejandro Alija Driving R to the air quality industry. NanoEnvi Analyst: a tool for designing large-scale air quality plans for improvement in ambient air quality Daniele Amberti Sequential Design of Experiments for model selection: an application to the energy sector Damian Zasina Emission inventory supported by R: dependency between calorific value and carbon content for lignite
		Statistics/Biostatistics II, FEBS 10, Chair: Steve Scott Colin Rundel Leveraging GPU libraries for efficient computation of Gaussian process models in R Jason Bryer TriMatch: An R Package for Propensity Score Matching of Non-Binary Treatments Christophe Genolini KmL3D: K-means for Joint Trajectories Mikiyas Gebresamuel Stochastic Modeling of Claim Frequency in the Ethiopian Motor Insurance Corporation: A Case Study of Hawassa District

	13:40	Lunch
	15:30	Invited Talk, Paraninfo, Chair: David Smith Hadley Wickham BigR data
Focus III	16:30	Time Series Analysis, FEBS 1, Chair: Rob Hyndman Constantino Antonio García Martínez Heart Rate Variability analysis in R with RHRV David Bronaugh Massively Parallel Computation of Climate Extremes Indices using R Alice Cleynen Segmentor3IsBack: an R package for the fast and exact segmentation of Seq-data Rob Hyndman hts: R tools for hierarchical time series
		Database applications, FEBS 2, Chair: Xavier de Pedro Finn Sandø Introducing SimpleDataManager - A simple data management workflow for R Guillaume Le Ray SenseLabOnline: Combining agile data base administration with strong data analysis Jan Wijffels ffbase: statistical functions for large datasets
		Using R for Teaching I, FEBS 9, Chair: María José Haro Virgilio Gómez Rubio Teaching statistics interactively with Geogebra and R Alfredo Sánchez Alberca RKTeaching: a new R package for teaching Statistics Lara Lusa genertest: a package for the developing exams in R Achim Zeileis Flexible generation of e-learning exams in R: Moodle quizzes, OLAT assessments, and beyond Karim Chine Teaching R in the Cloud
		Statistics/Biostatistics III, FEBS 10, Chair: Anabel Forte Maria Helena Gonçalves cold: a package for Count Longitudinal Data Vik Gopal kPop: An R package for the interval estimation of the mean of the selected populations. Tatjana Kecojevic GLM - a case study: Antagonistic relationships between fungi and nematodes John Kloke R Packages for Rank-based Estimates
	17:50	Tapas Cocktail, sponsored by Google, and Poster Session, Hall of Fac. of Economics and Business Science

POSTER SESSION

Bioinformatics

1. Nora M. Villanueva: [seq2R: Detecting DNA compositional change points](#)
2. Wolfgang Raffelsberger: [gxTools: Multiple approaches integrated in automated transcriptome analysis](#)

Chemometrics/Computational physics

3. Yuri Possokhov: [Automation of spectroscopic data processing in routine tests of coals using R](#)

Econometrics

4. Eui-Kyung Lee: [Asymmetric Volatility Transmission in Airline Related Companies in Stock Markets](#)
5. Giovanni Millo: [Panel time series methods in R](#)

Environmetrics/Ecological Modeling

6. Mark Liniger: [Climate Analysis Tools - An operational environment for climate products](#)
7. Julia Marczevska: [Statistical analysis with R of an effect of the air entrainment and the cement type on fresh mortar properties](#)
8. Krzysztof Maciejewski: [Statistical analysis in R of environmental and traffic noise in Kielce](#)
9. Ilya Kudrin: [Using R for dosimetry extremum tasks](#)
10. Francisco Alonso-Sarría: [An R script to model monthly climatic variables with GLM to be used in hydrological modelling](#)
11. Yousef Erfanifard: [Application of the nearest neighbour indices in spatstat R package for Persian oak \(*Quercus brantii* var. *persica*\) ecological studies in Zagros woodlands, Iran](#)

Marketing/Business Analytics

12. Anna Bednarczyk: [Pharmaceutical market analysis with R](#)
13. Youngchul Shin: [Efficiency analysis of companies using DEA model with R](#)

Official statistics/Public policy

14. María del Mar Rueda: [Using R to estimate parameters from multiple frames](#)
15. Antonio Arcos: [Calibration in Complex Survey using R](#)
16. Carlos Pérez-González: [Small area data visualization using ggplot2 library](#)
17. Emilio L. Cano: [Standardisation on Statistics: ISO Standards and R Tools](#)
18. Céline Bugli: [Using R2wd package to automatize your reporting from R to Microsoft Word document - An application of automatic report for a survey in telecommunication](#)

Other

19. Petr Maj: [TestR: R language test driven specification](#)
20. Karim Chine: [R as a Data Operating System for the Cloud](#)
21. Monika Zuchowicz: [Analysis of data from student surveys at Kielce University of Technology using R Commander and R Data Miner](#)
22. Gergely Daróczi: [A cloud infrastructure for R reports](#)
23. Kurt Ranalter: [On thinning spatial polygons](#)
24. Milena Nowek: [Data mining with Rattle](#)
25. Kamil Mogielski: [Analysis of load capacity of pipes with CIPP liners using R Rattle package](#)
26. Jaynal Abedin: [edeR: Email Data Extraction using R](#)
27. David Scott: [hwriterPlus: Extending the hwriter Package](#)

Social science

28. Yasuto Nakano: [Quantitative Text Analysis of readers' contributions on Japanese daily newspapers](#)

Statistics/Biostatistics

29. Peyman Eshghi: [R/Statistica Interface](#)
30. Guillermo Valles Castellano: [AMOEBA+ with R](#)
31. Javier Roca-Pardiñas: [Software developments for non-parametric ROC regression analysis](#)
32. Javier Roca-Pardiñas: [An R-package forWeighted Smooth](#)
33. Marta Sestelo: [Variable selection algorithm implemented in FWDselect](#)
34. Javier Roca-Pardiñas: [TPmsm: Estimation of the Transition Probabilities in 3-State Models](#)
35. Marta Sestelo: [NPRegfast: Inference methods in regression models including factor-by-curve interaction](#)
36. Jorge Luis Ojeda Cabrera: [intRegGOF: Modelling with the aid of Integrated Regression Goodness of Fit tests.](#)
37. Moisés Gómez-Mateu: [A Web-based Application as a Dynamical Tool for Clinical Trial Researchers](#)
38. Sandra González Maldonado: [Biomarker Discovery using Metabolite Profiling Data: Discussion of different Statistical Approaches.](#)
39. Klaus Marquart: [Reproducible and Standardized Statistical Analyses using R](#)
40. Francisco Javier Rodríguez Cortés: [Point process spatio-temporal product density estimation with R](#)
41. Jonatan A. González: [Spatio-Temporal ANOVA for replicated point patterns using R](#)
42. Xavier Barber: [Estimation of parameters using several regression tools in sewage sludge by NIRS](#)
43. Margarita Rincón Hidalgo: [Recipe for the implementation of a population dynamics bayesian model for anchovy: Supercomputing using doMC , rjags and coda R packages](#)

Teaching

44. Antonio Arcos: [A R tool to teach descriptive statistics](#)
45. Francisco Gomariz-Castillo: [Using R as continuous learning support in Sea Sciences degree](#)
46. Xosé M. Martínez: [Teaching introductory statistics to students in economics: a comparison between R and spreadsheet](#)
47. Pilar Sanmartin: [Introducing statistic and probability concepts with R in engineering grades](#)

Thursday 11th July

	09:00	Invited Talk, Paraninfo, Chair: J.J. Allaire Duncan Murdoch What's New in R 3.0.x?
Focus IV	10:00	Machine learning I, FEBS 1, Chair: Esteban Alfaro Bojan Mihajevic Lala Septem Riza Selçuk Korkmaz Max Kuhn BayesClass: An R package for learning Bayesian network classifiers Constructing fuzzy rule-based systems with the R package "frbs" bbRVM: an R package for Ensemble Classification Approaches of Relevance Vector Machines Classification Using C5.0
		Marketing/Business Analytics I, FEBS 2, Chair: José Luis Alfaro Louis Bajuk-Yorgan David Smith Alex Zolotovitski Allan Engelhardt Extending the Reach of R to the Enterprise Big-data, real-time R? Yes, you can. Large-Scale Predictive Modeling with R and Apache Hive: from Modeling to Production Non-Life Insurance Pricing using R
		Official statistics I, FEBS 9, Chair: Alexander Kowarik Giulio Barcaroli Martijn Tennekes Valentin Todorov Alexander Kowarik ReGenesees: symbolic computation for calibration and variance estimation Big data exploration with tabplot rwiot: An R package for Input-Output analysis on the World Input Output Database (WIOD) Make Your Data Confidential with the sdcMicro and sdcMicroGUI packages
		Statistical Modelling I, FEBS 10, Chair: Heather Turner Natalie Koziol Alexandra Kuznetsova Miguel Munoz Zuniga Maengseok Noh MRCV: A Package for Analyzing the Association Among Categorical Variables with Multiple Response Options Different tests on lmer objects (of the lme4 package): introducing the lmerTest package. Implementation of advanced polynomial chaos expansion in R for uncertainty quantification and sensitivity analysis Dhglm & frailtyHL : R package for double hierarchical generalized linear models and frailty models
	11:20	Tapas Break, sponsored by Oracle
	11:50	Machine learning II, FEBS 1, Chair: Max Kuhn Jim Harner Matthias Eckardt Tristan Mary-Huard A. Pedro Duarte Silva rknn: an R Package for Parallel Random KNN Classification with Variable Selection Patterns of Multimorbidity: Graphical Models and Statistical Learning ExactSampling: risk evaluation using exact resampling methods for the k Nearest Neighbor algorithm Classifying High-Dimensional Data with the The HiDimDA package
		Marketing/Business Analytics II, FEBS 2, Chair: Noelia García Kamson Lai Joseph Rickert Andrie de Vries Mark Hornick Groupon Impact Report: Using R To Power Large-Scale Business Analytics Statistics with Big Data: Beyond the Hype Using survival analysis for marketing attribution (with a big data case study) Big Data Analytics - Scaling R to Enterprise Data
		Official statistics II, FEBS 9, Chair: Matthias Templ Susie Jentoft Anna Dyga Andy South Han Lin Shang Using R for exploring sampling designs at Statistics Norway Application of R in Crime Data Analysis Maps can be rubbish for visualising global data : a look at other options. The use of demography package for population forecasting
		Statistical Modelling II, FEBS 10, Chair: Benjamin French Natalya Pya Rosalba Radice Peter Ruckdeschel Heather Turner Shape constrained additive modelling in R Semiparametric bivariate probit models in R: the SemiParBIVProbit package "RobExtremes": Robust Extreme Value Statistics — a New Member in the RobASt-Family of R Packages Generalized Bradley-Terry Modelling of Football Results
Focus V	13:10	Lunch

Focus VI	15:00 Invited Talk, Paraninfo, Chair: Matías Gámez
	José Manuel Benítez-Sánchez Computational Intelligence in R
	16:00 useR! 2013 Prize Awards, Paraninfo
	16:30 Programming, FEBS 1, Chair: Duncan Murdoch
	Rasmus Bååth An exposé of naming conventions in R
	Majid Sarmad Statistical Machine Translation tools in R
	Colin Gillespie Reference classes: a case study with the poweRlaw package
	Felipe Ortega Combining R and Python for scientific computing
	Biostatistics: Regression Methodology, FEBS 2, Chair: Gonzalo García-Donato
	Giampiero Marra Copula sample selection modelling using the R package SemiParSampleSel
Kaleidoscope/Lightning Talks	Andreas Alfons Robust model selection for high-dimensional data with the R package robustHD
	Marek Molas HGLMM and JHGLM: Package and codes for (joint)hierarchical generalized linear models
	Yiwen Zhang Fitting regression models for polytomous data in R
	R in the Central Banks, FEBS 9, Chair: Giuseppe Bruno
	Beat Hulliger Outliers in multivariate incomplete survey data
	Matjaž Jeran Use of R and LaTeX for periodical statistical publications
	Giuseppe Bruno Solving Dynamic Macroeconomic Models with R
	R in companies, FEBS 10, Chair: Josh Paulson
	Joe Cheng Shiny: Easy web applications in R
	Aleksandar Blagotić rapport, an R report template system
	J.J. Allaire Seamless C++ Integration with Rcpp Attributes
	Tobias Verbeke The R Service Bus: New and Noteworthy
17:50 Tapas Break, sponsored by R-Studio	
	18:20 Kaleidoscope I, FEBS 1, Chair: George Ostrouchov
	Marco Scutari packdep: network abstractions of CRAN and Bioconductor
	Douglas Mason The Beatles Genome Project: Cluster Analysis of Popular Music in R
	Richard Cotton The secrets of inverse programming
	Kaleidoscope II, FEBS 2, Chair: David Conesa
	Charles DiMaggio Mapping Hurricane Sandy Damage in New York City
	Graeme Hickey Unlocking a national adult cardiac surgery audit registry with R
	Alexander Bertram Renjin: A new R interpreter built on the JVM
	Lightning Talks I, FEBS 9, Chair: Emilio L. Cano
	Jonathan Cornelissen DataMind.org: developing an interactive online education platform for R
	Joseph Rickert Revolution Analytics supporting the R Community
	Gergely Daróczki Transforming R objects to Pandoc's markdown
	William Hughes A Simple (Simplistic?) Approach to Conjoint Analysis using R
	Tal Galili Updating R on Windows/Mac (the installr package)
	Catherine Hurley Seriation for visualisation with package DendSer
	Markus Gesmann R in Insurance
	Aleksandar Blagotić Rapport - reproducible statistical templates
	David Smith What is R? (with a surprise)
	Kevin Moore Breaking the mould without breaking the system - the challenges of change
	Sascha Frydman Mapping the Human Brain: How I Connected an MRI Analysis System with Rcpp
	Scott Sherrill-Mix glmnet and latent HIV: twists in the hunt for a cure
	Lightning Talks II, FEBS 10, Chair: Virgilio Gómez-Rubio
	Karsten Weinert Handling data with the datamart package
	Jan Graffelman Visualizing correlation matrices with R
	Romain Francois Rcpp is ready
	Andy South Mapping half a million petition signatures using R
	Ramon Diaz-Uriarte Using R for the parallelized analysis of big genomics data
	Jonathan McPherson RStudio Debugging Features Preview
	JJ Allaire Reproducible Presentations with RStudio
	Thierry Onkelinx Using mixed models for quality control of citizen science data
	Alexander Meyer Transcatheter Heart Valve Registry Data Explorer - a Shiny Use Case
	Mario Inchiosa 10 Reasons to Use Revolution R Enterprise - Free to Academics
	Alex Zolotovitski R work journal
	Wolfgang Raffelsberger Hints for R faster R code
	Przemysław Biecek R packages with PISA data. Let's learn about education!
21:30 Conference Dinner, Restaurant "Casino Primitivo"	

Friday 12th July

	09:00 Invited Talk, Paraninfo, Chair: TBC Steve Scott Bayesian computation in C++ with R as an interface
	10:00 Visualization/Graphics I, FEBS 1, Chair: Hadley Wickham Vladimir Skvortsov Radar data acquisition, analysis and visualization using reproducible research with Sweave Sacha Epskamp Network Visualizations of Statistical Relationships and Structural Equation Models Oliver Bracht tableR - An R based approach for creating table reports from surveys Kimberly Speerschneider likert: An R Package for Visualizing and Analyzing Likert-Based Items Richard Heiberger Design of likert graphics with lattice and mosaic
	High performance computing, FEBS 2, Chair: Marco Scutari Emma Huang Facilitating genetic map construction at large scales in R Drew Schmidt Elevating R to Supercomputers Jan Vitek R in Java: Why and How? Junji Nakano RhpC: A package for High-Performance Computing
	Modelling and Optimization, FEBS 9, Chair: Franciso Parreño Tomoaki Nakatani DCchoice: a package for analyzing dichotomous choice contingent valuation data Aditya Bhagwat Systems biology: modeling network dynamics in R Ching-Shih Tsou Evolutionary multi-objective optimization with R Emilio L. Cano An integrated Solver Manager: using R and Python for energy systems optimization
	GUIs/Interfaces, FEBS 10, Chair: Jan Graffelman Jorge Luis Ojeda Using Lazy-Evaluation to build the G.U.I. Cabrera Reijo Sund Survo for R - Interface for Creative Processing of Text and Numerical Data Zdzisław Piasta Using R in teaching statistics, quality improvement and intelligent decision support at Kielce University of Technology
Focus VII	11:20 Tapas Break, sponsored by TIBCO
	11:50 Visualization/Graphics II, FEBS 1, Chair: Jason Bryer Willem Ligtenberg A ggplot2 builder for Eclipse/StatET and Architect Jason Waddell Visualizing Multivariate Contrasts David Scott metaplot: Flexible Specification for Forest Plots Franciso Alonso-Sarría GaRGoyLE: A map composer using GRASS, R, GMT and Latex
	High performance computing II, FEBS 2, Chair: Felipe Ortega Dan Fraser Open Source Product Creation, Bosco Team Yann Richet Practical computer experiments in R Hannes Mühlleisen Symbiosis - Column Stores and R Statistics Michael Sannella Memory Management in the TIBCO Enterprise Runtime for R (TERR)
	Reproducible Research, FEBS 9, Chair: Emilio L. Cano David Montaner TiddlyWikiR: an R package for dynamic report writing. Randall Schumacker Synthesis of Research Findings Using R Isaac Subirana compreGroups updated: version 2.0
Focus VIII	Statistical Modelling III, FEBS 10, Chair: Rui Paulo Anabel Forte Deltell BayesVarSel. An R package for Bayesian Variable Selection. Dalia Chakrabarty Bayesian learning of model parameters given matrix-valued information, using a new matrix-variate Gaussian Process. David Conesa FluDetWeb: an interactive web-based system for the early detection of the onset of influenza epidemics Jason Osborne Looking for (and finding!) hidden additivity in complete block designs with the hidden package.
	13:10 Closing Remarks, Fac. of Economics and Business
	13:30 Lunch/Paella

NOTES

Printed abstracts will not be provided at the conference. The abstract booklet is available to view at http://www.edii.uclm.es/~useR-2013/docs/useR2013_abstract_booklet.pdf.

Please note that there are three different formats for contributed talks:

useR! Kaleidoscope: These sessions will give a broad overview of the many different applications of R and should appeal to a wide audience.

useR! Focus Sessions: These sessions will focus on topics of special interest and may be more technical.

useR! Lightning Talks: These sessions, with oral presentations of 5 minutes, provide a platform for participants to speak on any R-related topic and should particularly appeal to R newbies.

Information for Speakers, Session Chairs and Poster Presenters

- ▷ Presenters of Kaleidoscope and Focus contributed talks, please note that your talk is scheduled for 17 minutes, followed by 3 minutes discussion.
- ▷ Presenters of Lightning talks, please note that your talk is scheduled for 5 minutes, with 1 minute question/transition time. A variation of the *pecha kucha* and *ignite* formats will be used, in which you must provide 15 slides to accompany your talk and each slide will be shown for 20 seconds. Slides must be provided in PDF format and sent to useR-2013@R-project.org by 17:00 GMT, Friday 5 July, 2013.
- ▷ Each useR! Invited Lecture will last 45 minutes, with 10 minutes at the end of the lecture reserved for questions.
- ▷ Technical details: All lecture rooms are equipped with an LCD projector and a computer or laptop that is connected to the internet. Unless speakers require their own laptop for software demonstrations, speakers are expected to ensure that a PDF of their presentation slides is on the computer provided, before the start of their session. For presenters of Lightning Talks, this is achieved by sending the slides in advance as described above; for presenters of other talks, please see the conference assistant in the relevant lecture room to arrange transfer of your slides. Conference assistants will be available in the lecture rooms at least 10 minutes before the program starts each day and at least 10 minutes before the program recommences after each coffee or lunch break. Please arrive well before the start of your session and introduce yourself to the Session Chair. During your talk, please look out for the countdown cards that the Chair will use to signal that your time is coming to a close.
- ▷ Session Chairs: Please check the Registration Desk to know whether all your speakers have arrived to the conference prior to your session. Please arrive well before the start of your session to meet the speakers and ensure that they have a PDF of their slides on the room computer. Countdown cards will be provided to help you keep the speakers to time. If we are aware that a speaker is missing up to 2 hours prior to the relevant session, then the other talks will be brought forwards and a notice placed on the News Board, otherwise can we please request that Chairs keep to the timetable, and in the event of a missing speaker, advise the audience to go to an alternative talk.
- ▷ For those preparing posters, the poster boards can accommodate posters of size A0 (Portrait) or A1 (Landscape). Poster presenters should arrive at least 15 minutes prior to the start of the poster session to put up their poster. Boards will be put in place on Wednesday morning. Posters will have allocated boards as numbered in the schedule. Presenters should stay in the vicinity of their poster for the first hour of the session. Please take down your poster at the end of the session; if you are unable to stay until the end (20:00) remaining posters will be removed and can be retrieved from the registration desk the next day.

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