#### Positions

- March 2018 MPG Minerva Fast-Track Research Group Leader, Department of Em-Present pirical Inference at the Max Planck Institute for Intelligent Systems, Tübingen, Germany.
- Oct. 2017 Research Group Leader, Department of Empirical Inference, Max Planck Feb. 2018 Institute for Intelligent Systems, Tübingen, Germany.
- March 2017 **Research Associate**, Department of Engineering, University of Cambridge, Sept. 2017 Cambridge, UK, Advisor: Prof. Zoubin Ghahramani.
  - June 2015 **Humboldt Post-Doctoral Fellowship Holder**, *Host: Max Planck Institute* Feb. 2017 for Software Systems, Kaiserslautern, Germany, Host: Ph.D. Manuel Gomez-Rodriguez.
  - Feb. 2015 **Post-Doctoral Researcher**, Max Planck Institute for Software Systems, Kaiser-May 2015 slautern, Germany, Host: Ph.D. Manuel Gomez-Rodriguez.
- 2012 2015 **Research Assistant for Dr. Leiva-Murillo**, Universidad Carlos III de Madrid, Madrid, Spain, Project: AGES-CM S2010/BMD-2422.
- Feb. 2014 Visiting Researcher, Department of Engineering, University of Cambridge, April 2014 Cambridge, UK, Advisor: Prof. Zoubin Ghahramani.
- Sept. 2013 **Intern**, Max Planck Institute for Software Systems, Saarbrücken, Germany, Dec. 2013 Supervisors: Dr. Gummadi and Dr. Gomez-Rodriguez.
- 2010 2012 MSc. Studentship, Universidad Carlos III de Madrid, Madrid, Spain.
  - 2010 Research Assistant for Dr. Míguez, Universidad Carlos III de Madrid, Madrid, Spain, Project: Consolider-COMONSENS (http://www.comonsens.org/).
- 2008 2009 ERASMUS (European Region Action Scheme for the Mobility of University Students) Studentship, Leibniz Universität Hannover, Hannover, Germany.
- 2003 2009 Spanish Ministry of Education and Science Studentship for undergraduates, Universidad Politécnica de Cartagena, Murcia, Spain.

#### Education

- 2012–2014 **PhD. in Multimedia and Communications**, Supervisor Fernando Perez-Cruz, Universidad Carlos III de Madrid, Madrid, Spain.

  Doctoral Dissertation: "Bayesian Nonparametric Modeling of Psychiatric Disorders."
- 2010–2012 MSc. in Multimedia and Communications (Data and Signal Processing), Universidad Carlos III de Madrid, Madrid, Spain.
   MSc. Thesis: "Bayesian Nonparametric Modeling of Suicide Attempts"
- 2008–2009 **Bachelor's Final Project**, Leibniz Universität Hannover, Hannover, Germany. Title: "A hybrid SS-ToA wireless geolocation based on path attenuation: Robustness investigation under imperfect path loss exponent."
- 2003–2009 Electrical Engineering (Signal Processing and Communications), Universidad Politécnica de Cartagena, Murcia, Spain.

#### Grants and Awards

- 2019-2026 **DFG Cluster of Excellence**, on "Machine Learning: New Perspectives for Science", Lead by the University of Tübingen and the MPI for Intelligent Systems, and funded by the DFG–German Research Foundation..
  - Nominated to the CNIL-Inria Privacy Award 2018, co-organised by Inria, the French national research institute in computer science and the French Data Protection Authority (CNIL), for the article "Fairness Beyond Disparate Treatment & Disparate Impact: Learning Classification without Disparate Mistreatment", WWW'17.
- 2018-present MPG Minerva Fast Track Fellowship, Funded by the Max Planck Society, Germany.
  - 2017 Best Paper Award Honorable Mention, "Fairness Beyond Disparate Treatment & Disparate Impact: Learning Classification without Disparate Mistreatment", WWW'17.
  - 2017 **Best Paper Award**, "General Latent Feature Modeling for Data Exploration Tasks", ICML 2017 Workshop on Human Interpretability.
  - 2015-2017 **Humboldt Post-doctoral Fellowship**, Funded by the Alexander von Humboldt Foundation, Germany.
    - 2014 Google Travel Award for NIPS'14, Montreal, Canada.
    - 2013 Travel Award from 9th Bayesian Nonparametric Conference, Amsterdam, Netherlands.
    - 2012 Travel Award from NIPS Conference, Lake Tahoe, USA.

# Research Projects

- 2019-2026 Cluster of Excellence: "Machine Learning: New Perspectives for Science".

  Funding Organization: DFG-German Research Foundation. Principal Investigators: Researchers from University of Tübingen and Max Planck Institute for Intelligent Systems (including Isabel Valera). URL: https://uni-tuebingen.de/en/research/core-research/machine-learning-new-perspectives-for-science/home/
- 2017-present "Automatic Data Pre-processing".

  Funding Organization: Samsung. Principal Investigators: Isabel Valera and Zoubin Ghahramani.
  - 2012-2015 "Enviroment y Genes in Schizophrenia".

    Funding Organization: Plan Regional-Programas I+D of Comunidad de Madrid. Principal Investigator: Jose Miguel Leiva Murillo.
  - 2010-2013 "Communication System Design and Simulation".

    Funding Organization: INDRA. Principal Investigator: Antoniop Artés Rodríguez.
  - 2011-2012 "Analysis, Design and Optimization of Next Generation Wireless Communications Systems" (Scientific National Researching Plan, in collaboration with University of Porto).
    - Funding Organization: Spanish Research Ministry. Principal Investigator: Fernando Perez-Cruz.
  - 2011-2012 "Estimation, Transmission and Optimization in Sensor Networks".
    Funding Organizations: Government of Madrid and University Carlos III in Madrid.
    Principal Investigator: Fernando Perez-Cruz.

# Student Supervision

- PhD Advisor Amir Karimi (PhD student at the Max Planck-ETH Center for Learning Systems, Germany & Switzerland), Olga Mineva (PhD student at the Max Planck ETH Center for Learning Systems, Germany & Switzerland).
  - Mentoring Francesco Locatello (PhD student at the Max Planck ETH Center for Learning Systems, Germany & Switzerland), Diego Fioravanti (PhD student at the MPI for Intelligent Systems, Germany), Utkarsh Upadhyay (PhD student at the MPI-SWS, Germany), Bilal Zafar (PhD student at the MPI-SWS, Germany), Charalampos Mavroforakis (PhD student at Boston University, US), Behzad Tabibian (PhD student at the MPI for Intelligent Systems, Germany) and Mehrdad Farajtabar (PhD student at the Georgia Tech, US).

# Teaching Experience

- 2018 Tutorial on "Learning with Temporal Point Processes", 2018 Boot Camp of the International Max Planck Research School (IMPRS) for Intelligent Systems (IS), Ulm, Germany.
- 2018 ICML tutorial on "Learning with Temporal Point Processes", 35th International Conference on Machine Learning 2018, Stockholm, Sweden.
- 2017 Practical tutorial on "Social Network Analysis", Machine Learning Summer School 2017, Tübingen, Germany.
- 2016 Practical tutorial on "Machine Learning for Networks", Machine Learning Summer School 2016, Cadiz, Spain.
- 2015 2016 Seminar on "Social and Information Networks", TU Kaiserslautern, Kaiserslautern, Germany.
- 2010 2012 Teaching Assistant in Digital Communications, Communication System Design and Simulation and Advanced Techniques for Signal Processing and Communications, Universidad Carlos III de Madrid, Madrid, Spain.

### Academic Services

- 2020 Program Chair of the European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD 2020), Ghent, Belgium, 2020.
- 2018 Symposium Chair of the Data Learning and Inference Conference (DALI 2018), Lanzarote, Spain, April 2018.
- 2017 Co-organizer of the Data Learning and Inference Conference (DALI 2017), Tenerife, Spain, April 2017.
- 2016 Co-organizer of the Women in Machine Learning Workshop (WiML **2016**), Barcelona, Spain, December 2016.
- 2016 Co-organizer of the Machine Learning Summer School (MLSS 2016), Cadiz, Spain, May 2016.

## Reviewing

- Journals Transactions on Knowledge Discovery from Data (TKDD), ACM Transactions on the Web (TWEB), Elsevier Journal Artificial Intelligence (ARTINT).
- Conferences Artificial Intelligence and Statistics (AISTATS), International Conference on Machine Learning (ICML), Neural Information Processing Systems (NIPS), International Conference on Web Search and Data Mining (WSDM), Association for the Advancement of Artificial Intelligence Conference on Artificial Intelligence (AAAI).

Area Chair AISTATS (2018-2019), ICML (2019), NIPS (2019), WSDM (2019).

#### Invited Talks

- 2018 "Automatic Bayesian Density Analysis", Seminar on Automating Data Science, Schloss Dagstuhl, Leibniz Zentrum fuer Informatiks (Saarland, Germany), October, 2018.
- 2018 "Unsupervised Learning for Real-world Data", Computer Science Seminar, ETH Zürich, Zürich, Switzerland, March, 2018.
- 2018 "Towards machine learning for real-world data", Women in Data Science (WiDS) Conference, GESIS: Leibniz Institute for Social Science, Köln, Germany, May, 2018.
- 2018 "Fairness in classification", *Invited talk*, Universidad Carlos III Madrid, Madrid, Spain, April, 2018.
- 2017 "Machine learning for Dynamic Social Network Analysis", Seminar at UNSW Canberra, Canberra, Australia, August, 2017.
- 2017 "General Latent Feature Models for Heterogeneous Datasets", Invited talk at Data61 Institute of the National University of Australia, Canberra, Australia, August, 2017.
- 2017 "Automatic Discovery of the Statistical Types of Variables in a Dataset", *Invited* talk at Amazon Berlin, Berlin, Germany, June, 2017.
- 2017 "Automatic Discovery of the Statistical Types of Variables in a Dataset", *Invited* talk at the Data Science Process Workshop at DALI 2017, Tenerife, Spain, April, 2017
- 2017 "Automatic Discovery of the Statistical Types of Variables in a Dataset", Invited talk at the Artificial Intelligence and Machine Learning at Microsoft Research Cambridge, Cambridge, UK, March, 2017.
- 2017 "Interpretable Latent Variable Models", Seminar at Banco Bilbao Vizcaya Argentaria, Madrid, Spain, March, 2017.
- 2016 "Modeling the Dynamics of Online Learning Activity", Talk at University of Cambridge, Cambridge, UK, June, 2016.
- 2015 "Modeling the Dynamics of Online Learning Activity", Invited talk at the workshop Bayesian Nonparametrics: The Next Generation at NIPS 2015, Montreal, Canada, December, 2015.
- 2015 "Infinite Factorial Dynamical Model", *Talk at Harvard University*, Cambridge, MA, USA, November, 2015.
- 2015 "A Bayesian nonparametric approach for blind multiuser channel estimation", Invited talk at European Signal Processing Conference (EUSIPCO), Nice, France, August, 2015.