

František Bartoš

PHD CANDIDATE IN PSYCHOLOGY, CFO OF JASP SERVICES

Amsterdam, Netherlands

✉ f.bartos96@gmail.com | 🏠 frantisek-bartos.info/ | 📺 FBartos | 📄 franti%C5%A1ek-barto%C5%A1-50249b192/

About

I am a Psychological Methods PhD candidate at the University of Amsterdam and cofounder & CFO of JASP Services. My goal is to improve statistical procedures and enable researchers to draw better inferences from data. I am interested in Bayesian statistics, meta-analyses, publication bias, and replicability. I also flipped some coins a couple of times.

Education

University of Amsterdam

Amsterdam, Netherlands

PHD CANDIDATE IN PSYCHOLOGY

2021 - Present

- Research focus on Bayesian hypothesis testing, Bayesian model-averaging, meta-analyses, and publication bias adjustment.
- Developing novel statistical methods for meta-analytic inference in the presence of publication bias.
- Creating open-source software packages and contributing to the development of JASP.

University of Amsterdam

Amsterdam, Netherlands

RESEARCH MASTER'S IN PSYCHOLOGY

2019 - 2021

- Thesis published as F Bartoš, F Aust, JM Haaf (2022). Informed Bayesian survival analysis. BMC Medical Research Methodology, 22(1), 1-22.
- Internship published as F Bartoš, M Maier, D Quintana, EJ Wagenmakers (2022). Adjusting for publication bias in JASP and R: Selection models, PET-PEESE, and robust Bayesian meta-analysis. Advances in Methods and Practices in Psychological Science, 5(3), 1-19.

Faculty of Arts, Charles University

Prague, Czech Republic

BACHELOR'S DEGREE IN PSYCHOLOGY

2016 - 2019

- Thesis Faktory asociovane s podvadenim (Factors associated with dishonesty) partially published as: F Bartoš (2024). The untrustworthy evidence in dishonesty research. Meta-Psychology, 8, 1-7.

Experience

JASP Services

Amsterdam, Netherlands

CO-FOUNDER & CHIEF FINANCIAL OFFICER

2025 - Present

- Co-founded commercial entity to support JASP statistical software development and sustainability.
- Managing financial operations and business strategy.

Faculty of Social Sciences, Charles University

Prague, Czech Republic

RESEARCH SCIENTIST

2024 - 2025

- Development of publication bias adjustment methodology for meta-analyses in economics.

Institute of Computer Science, Czech Academy of Sciences

Prague, Czech Republic

PHD FELLOW

2022 - Present

- Collaborating on research focused on inter-rater reliability.
- Developing statistical methods for assessing agreement and reliability in behavioral coding.
- Contributing to methodological advances in psychometrics.

JASP Development Team

Amsterdam, Netherlands

RESEARCH ASSISTANT

2019 - 2021

- R developer for JASP Development Team.
- Implemented Learn Bayes and Mixed Effects modules.
- Developed publication bias correction methods for the Meta-Analysis module.

Center for Educational Measurement and Psychometrics, Charles University

Prague, Czech Republic

RESEARCH ASSISTANT

2018 - 2022

- Collaborated with the Institute of Computer Science on project 'Testing heterogeneity in inter-rater reliability'.
- Developed Bayesian methodology for assessing heterogeneity in inter-rater reliability.

Prague Laboratory for Experimental Social Sciences

RESEARCH ASSISTANT

- Created ShinyApp for data visualization and interactive analysis.
- Analyzed data and collaborated on moral psychology research.
- Contributed to experimental design and statistical analysis of behavioral studies.

Prague, Czech Republic

2017 - 2021

Faculty of Arts, Charles University

RESEARCH ASSISTANT

- Cleaned, prepared, and analyzed data from the Vysočina Cohort study.
- Conducted systematic reviews and meta-analyses.
- Contributed to longitudinal research on developmental psychology.

Prague, Czech Republic

2017 - 2020

Institute of Psychology, Czech Academy of Sciences

RESEARCH ASSISTANT

- Developed a similarity measure for photographs using convolutional neural networks.
- Implemented Python code for grid computing and conducted data analysis in R.
- Created norms for a Czech lexical test through data cleaning and statistical analysis.

Prague, Czech Republic

2017 - 2019

Publications

META-ANALYSIS & PUBLICATION BIAS METHODS

- 📄 **F Bartoš**, EJ Wagenmakers (2025). Meta-analysis with JASP, Part II: Bayesian approaches. *arXiv Preprint*.
- 📄 **F Bartoš**, EJ Wagenmakers, W Viechtbauer (2025). Meta-analysis with JASP, Part I: Classical approaches. *arXiv Preprint*.
- 📄 **F Bartoš**, U Schimmack (2025). Z-Curve plot: A visual diagnostic for publication bias in meta-analysis. *arXiv Preprint*.
- 📄 **F Bartoš**, M Maier, EJ Wagenmakers (2025). Robust Bayesian multilevel meta-analysis: Adjusting for publication bias in the presence of dependent effect sizes. *PsyArXiv Preprint*.
- 📄 **F Bartoš**, M Maier, TD Stanley, EJ Wagenmakers (2025). Robust Bayesian meta-regression: Model-averaged moderation analysis in the presence of publication bias. *Psychological Methods*.
- 📄 M Maier, **F Bartoš**, EJ Wagenmakers (2023). Robust Bayesian meta-analysis: Addressing publication bias with model-averaging. *Psychological Methods*, 1, 107-122.
- 📄 **F Bartoš**, M Maier, EJ Wagenmakers, H Doucouliagos, TD Stanley (2022). Robust Bayesian meta-analysis: Model-averaging across complementary publication bias adjustment methods. *Research Synthesis Methods*, 1, 99-116.
- 📄 **F Bartoš**, U Schimmack (2022). Z-curve 2.0: Estimating replication rates and discovery rates. *Meta-Psychology*, 1-14.
- 📄 **F Bartoš**, M Maier, D Quintana, EJ Wagenmakers (2022). Adjusting for publication bias in JASP and R: Selection models, PET-PEESE, and robust Bayesian meta-analysis. *Advances in Methods and Practices in Psychological Science*, 3, 1-19.
- 📄 **F Bartoš**, QF Gronau, B Timmers, WM Otte, A Ly, EJ Wagenmakers (2021). Bayesian model-averaged meta-analysis in medicine. *Statistics in Medicine*, 30, 6743-6761.

STATISTICAL METHODS & THEORY

- 📄 **F Bartoš**, S Pawel, BS Siepe (2025). Living synthetic benchmarks: A neutral and cumulative framework for simulation studies. *arXiv Preprint*.
- 📄 S Pawel, **F Bartoš**, BS Siepe, A Lohmann (2025). Handling missingness, failures, and non-convergence in simulation studies: A review of current practices and recommendations. *The American Statistician*.
- 📄 BS Siepe, **F Bartoš**, TP Morris, AL Boulesteix, DW Heck, S Pawel (2024). Simulation studies for methodological research in psychology: A standardized template for planning, preregistration, and reporting.. *Psychological Methods*.
- 📄 **F Bartoš**, EJ Wagenmakers (2023). A general approximation to nested Bayes factors with informed priors. *Stat*, 1, e600.
- 📄 P Martinková, **F Bartoš**, M Brabec (2023). Assessing inter-rater reliability with heterogeneous variance components models: Flexible approach accounting for contextual variables. *Journal of Educational and Behavioral Statistics*, 3, 349-383.
- 📄 **F Bartoš**, F Aust, JM Haaf (2022). Informed Bayesian survival analysis. *BMC Medical Research Methodology*, 1, 1-22.

EMPIRICAL RESEARCH & META-SCIENCE

- 📄 **F Bartoš**, A Sarafoglou, HR Godmann, A Sahrani, D Klein Leunk, PY Gui, ..., EJ Wagenmakers (2025). Fair coins tend to land on the same side they started: Evidence from 350,757 flips. *Journal of the American Statistical Association*.
- 📄 **F Bartoš**, M Maier, EJ Wagenmakers, F Nippold, H Doucouliagos, ..., TD Stanley (2024). Footprint of publication selection bias on meta-analyses in medicine, environmental sciences, psychology, and economics. *Research Synthesis Methods*, 3, 500-511.
- 📄 U Schimmack, **F Bartoš** (2023). Estimating the false discovery risk of (randomized) clinical trials in medical journals based on published p-values. *Plos One*, 8, e0290084.
- 📄 **F Bartoš**, M Maier, DR Shanks, TD Stanley, M Sladekova, EJ Wagenmakers (2023). Meta-analyses in psychology often overestimate evidence for and size of effects. *Royal Society Open Science*, 7, 230224.

- M Maier, **F Bartoš**, TD Stanley, DR Shanks, AJL Harris, EJ Wagenmakers (2022). No evidence for nudging after adjusting for publication bias. *Proceedings of the National Academy of Sciences*, 31, e2200300119.

OTHER PUBLICATIONS





- M Maier, **F Bartoš**, DS Quintana, F Dablander, D den Bergh, M Marsman, A Ly, EJ Wagenmakers (2025). Model-averaged Bayesian t-tests. *Psychonomic Bulletin & Review*, 3, 1007-1031.
- M Khudair, A Marcuzzi, GD Tempest, K Ng, R Peric, **F Bartoš**, M Maier, ..., FCM Ling (2025). DE-PASS best evidence statement (BEST): a systematic review and meta-analysis on the effectiveness of trials on device-measured physical activity and sedentary behaviour and *Sports Medicine*, 2, 419-458.
- F Bartoš**, A Sarafoglou, B Aczel, S Hoozeveen, C Chambers, EJ Wagenmakers (2025). Introducing the Journal of Robustness Reports. *Journal of Robustness Reports*.
- F Bartoš**, A Sarafoglou, B Aczel, S Hoozeveen, CD Chambers, EJ Wagenmakers (2025). Introducing synchronous robustness reports. *Nature Human Behaviour*, 635-637.
- E Villamor, G Galán-Henríquez, **F Bartoš**, GE Gonzalez-Luis (2025). Beneficial vs harmful effects of pharmacological treatment of patent ductus arteriosus: A Bayesian meta-analysis. *Pediatric Research*.
- M Borges-Luján, G Galán-Henríquez, RI Rodríguez-Viera, **F Bartoš**, GE González-Luis, E Villamor (2025). Association between hypertensive disorders of pregnancy and patent ductus arteriosus in very preterm infants: A Bayesian model-averaged meta-analysis. *Children*, 6, 762.
- E van Westering-Kroon, TM Hundscheid, K Van Mechelen, **F Bartoš**, SH Abman, E Villamor (2025). Sex differences in the risk of bronchopulmonary dysplasia and pulmonary hypertension: a Bayesian meta-analysis. *Pediatric Research*.
- HR Godmann, **F Bartoš**, EJ Wagenmakers (2025). Truncating the likelihood allows outlier exclusion without overestimating the evidence in the Bayes factor t test. *Psychological Methods*.
- TM Hundscheid, I Amodeo, G Cavallaro, CR Hooijmans, **F Bartoš**, E Villamor (2025). Antenatal sildenafil for congenital diaphragmatic hernia: A systematic review and Bayesian meta-analysis of preclinical studies. *Biomedicine*, 9, 2274.
- VL Ott, D van den Bergh, B Boutin, J van Doorn, **F Bartoš**, N Judd, ..., EJ Wagenmakers (2025). Informative data visualization with raincloud plots in JASP. *Behavior Research Methods*, 9, 265.
- NPA Lissone, TM Hundscheid, GM Galán-Henríquez, GE González-Luis, **F Bartoš**, E Villamor (2025). Association between endotype of prematurity and cystic periventricular leukomalacia: A Bayesian model-averaged meta-analysis. *Children*, 8, 1065.
- A Finnemann, N Skjerdingsstad, LG Speyer, O Zavlis, **F Bartoš**, R Wiers, ..., OV Ebrahimi (2025). Urban-rural differences in anxiety and depression in the UK, New Zealand, and Norway. *Journal of Affective Disorders*.
- V Shiramizu, J Stern, **F Bartoš**, Y Rafiee, TV Pollet, BC Jones (2025). Testing the congruency hypothesis using meta-analysis: Are changes in oral contraceptive use correlated with partnered women's sexual satisfaction?. *Hormones and Behavior*, 105719.
- E Villamor, **F Bartoš** (2025). Treatment of the patent ductus arteriosus. *JAMA Pediatrics*.
- MJ Huizing, G Vizzari, **F Bartoš**, G Cavallaro, ML Gianni, E Villamor (2025). Absence of evidence of beneficial effects of human milk-based fortifier: A Bayesian model-averaged meta-analysis. *Acta Paediatrica*, 114, 3309-3316.
- B Večkalov, SJ Geiger, **F Bartoš**, MP White, BT Rutjens, F van Harreveld, ..., S van der Linden (2024). A 27-country test of communicating the scientific consensus on climate change. *Nature Human Behaviour*, 10, 1892-1905.
- TD Stanley, H Doucouliagos, M Maier, **F Bartoš** (2024). Correcting bias in the meta-analysis of correlations. *Psychological Methods*.
- M Maier, **F Bartoš**, N Raihani, DR Shanks, TD Stanley, EJ Wagenmakers, AJL Harris (2024). Exploring open science practices in behavioural public policy research. *Royal Society Open Science*, 2, 231486.
- V Beermann, JM Enkmann, M Maier, **F Bartoš** (2024). How effective are digital green nudges? A publication bias-adjusted meta-analysis. *ICIS 2024 Proceedings*.
- F Bartoš**, P Martinková (2024). Assessing quality of selection procedures: Lower bound of false positive rate as a function of inter-rater reliability. *British Journal of Mathematical and Statistical Psychology*, 3, 651-671.
- A Sarafoglou, F Bartoš, A Stefan, JM Haaf, EJ Wagenmakers (2024). "This behavior strikes us as ideal": assessment and anticipations of Huisman (2022). *Psychonomic Bulletin & Review*, 31, 242-248.
- A Kolovelonis, I Sympas, A Marcuzzi, M Khudair, K Ng, GD Tempest, ..., FCM Ling (2024). DE-PASS best evidence statement (BEST): determinants of adolescents' device-based physical activity and sedentary behaviour in settings: a systematic review and meta-analysis. *BMC Public Health*, 1, 1706.
- FCM Ling, M Khudair, K Ng, GD Tempest, R Peric, **F Bartoš**, M Maier, ..., A Marcuzzi (2024). DE-PASS best evidence statement (BEST): Determinants of self-report physical activity and sedentary behaviours in children in settings: A systematic review and meta-analyses. *PloS One*, 11, e0309890.
- MJ Huizing, TM Hundscheid, **F Bartoš**, E Villamor (2024). A Bayesian reanalysis of the overall and sex-disaggregated results of the neonatal oxygenation prospective meta-analysis (NeOProm). *Antioxidants*, 5, 509.
- F Bartoš** (2024). The untrustworthy evidence in dishonesty research. *Meta-Psychology*, 1-7.
- T Kitano, **F Bartoš**, Y Nabeshima, AA Sayour, A Kovács, M Takeuchi (2024). Impact of cardiovascular magnetic resonance-derived right ventricular ejection fraction on adverse outcomes: A robust Bayesian model-averaged meta-analysis. *Journal of Cardiovascular Magnetic Resonance*, 2, 101118.
- K Van Mechelen, TM Hundscheid, E van Westering-Kroon, **F Bartoš**, E Villamor (2024). Association between antenatal antibiotic exposure and bronchopulmonary dysplasia: A systematic review and Bayesian model-averaged meta-analysis.

Neonatology, 3, 378-387.

-  TMH MD, **F Bartoš**, E Villamor (2024). A Bayesian reanalysis of the overall and sex-disaggregated results of the NeOProm study. *Oxidative Stress and Oxygen Saturation in Neonatology*, 5, 509.
-  E Villamor, E van Westering-Kroon, GE Gonzalez-Luis, **F Bartoš**, SH Abman, MJ Huizing (2023). Patent ductus arteriosus and bronchopulmonary dysplasia-associated pulmonary hypertension: A Bayesian meta-analysis. *JAMA Network Open*, 11, e2345299.
-  TD Stanley, JPA Ioannidis, M Maier, H Doucouliagos, WM Otte, **F Bartoš** (2023). Unrestricted weighted least squares represent medical research better than random effects in 67,308 Cochrane meta-analyses. *Journal of Clinical Epidemiology*, 53-58.
-  TM Hundscheid, S Gulden, MF Almutairi, **F Bartoš**, G Cavallaro, E Villamor (2023). Sex differences in the risk of retinopathy of prematurity: A systematic review, frequentist and Bayesian meta-analysis, and meta-regression. *World Journal of Pediatrics*, 340-352.
-  TM Hundscheid, MJ Huizing, E Villamor-Martinez, **F Bartoš**, E Villamor (2023). Association of funisitis with short-term outcomes of prematurity: A frequentist and Bayesian meta-analysis. *Antioxidants*, 2, 534.
-  A Sarafoglou, F Aust, M Marsman, **F Bartoš**, EJ Wagenmakers, JM Haaf (2023). Multibridge: an R package to evaluate informed hypotheses in binomial and multinomial models. *Behavior Research Methods*, 8, 4343-4368.
-  MF Almutairi, S Gulden, TM Hundscheid, **F Bartoš**, G Cavallaro, E Villamor (2023). Platelet counts and risk of severe retinopathy of prematurity: A Bayesian model-averaged meta-analysis. *Children*, 12, 1903.
-  S Hoozevee, A Sarafoglou, B Aczel, Y Aditya, AJ Alayan, PJ Allen, ..., EJ Wagenmakers (2022). A many-analysts approach to the relation between religiosity and well-being. *Religion, Brain & Behavior*.
-  I Grossmann, A Rotella, CA Hutcherson, K Sharpinsky, MEW Varnum, ..., T Wilkening (2022). Insights into accuracy of social scientists' forecasts of societal change. *Nature Human Behaviour*, 484-501.
-  K Mohammed, A Marcuzzi, Kwok N, GD Tempest, F Bartoš, P Ratko, ..., FCM Ling (2022). DE-PASS Best Evidence Statement (BEST): modifiable determinants of physical activity and sedentary behaviour in children and adolescents aged 5-19 years-a protocol for systematic review and meta-analysis. *BMJ Open*, 12, e059202.
-  **F Bartoš**, M Maier (2022). Power or alpha? The better way of decreasing the false discovery rate. *Meta-Psychology*, 1-10.
-  A Ly, D van den Bergh, **F Bartoš**, EJ Wagenmakers (2021). Bayesian inference with JASP. *The ISBA Bulletin*, 7-15.
-  L Takács, SP Putnam, C Monk, HG Dahlen, C Thornton, **F Bartoš**, ..., JL Peters (2021). Associations between mode of birth and neuropsychological development in children aged 4 years: results from a birth cohort study. *Child Psychiatry & Human Development*, 6, 1094-1105.
-  L Takács, **F Bartoš**, P Čepický, Š Kaňková (2021). The effects of intrapartum administration of synthetic oxytocin on breastfeeding in the first 9 months postpartum: A longitudinal prospective study. *Breastfeeding Medicine*, 12, 965-970.
-  L Takács, SP Putnam, **F Bartoš**, P Čepický, C Monk (2021). Parity moderates the effect of delivery mode on maternal ratings of infant temperament. *Plos One*, 8, e0255367.
-  L Takács, V Kandrnal, Š Kaňková, **F Bartoš**, J Mudrák (2020). The effects of pre-and post-partum depression on child behavior and psychological development from birth to pre-school age: a protocol for a systematic review and meta-analysis. *Systematic Reviews*, 1, 146.
-  **F Bartoš**, P Martinková, M Brabec (2019). Testing heterogeneity in inter-rater reliability. *The Annual Meeting of the Psychometric Society*, 322.





OTHER PREPRINTS

-  JM Pfadt, **F Bartoš**, HR Godmann, ..., EJ Wagenmakers (2025). A methodological metamorphosis: The rapid rise of Bayesian inference and open science practices in psychology. *PsyArXiv Preprint*.
-  VKM Shiramizu, **F Bartoš**, BC Jones, TV Pollet (2025). Little evidence for group differences in 2D:4D ratios based on sexual orientation after adjusting for publication bias. *PsyArXiv Preprint*.
-  EJ Wagenmakers, **F Bartoš** (2025). People prefer the taste of Belgian mineral water Chaudfontaine over Amsterdam tap water. *PsyArXiv Preprint*.
-  **F Bartoš**, Z Irsova, T Havránek, EJ Wagenmakers (2025). Adjusting for publication bias reveals evidence against social comparison as a behaviour change technique across the behavioural sciences. *PsyArXiv Preprint*.
-  **F Bartoš**, P Martinková, EJ Wagenmakers (2025). Adjusting for publication bias reveals no evidence for the effect of ChatGPT on students' learning performance, learning perception, and higher-order thinking. *PsyArXiv Preprint*.
-  T Pan, X Zhao, **F Bartoš**, H Larsen, V Manning, M Boffo, RW Wiers (2025). Cognitive bias modification in alcohol use disorder and problematic drinking: A revised and updated IPD Bayesian meta-analysis. *PsychArchives Preprint*.
-  **F Bartoš**, HR Godmann (2025). A Comment on "A systematic review and meta-analysis of transdiagnostic cognitive behavioural therapies for emotional disorders". *NA*, 213.
-  V Defelippe, **F Bartoš**, EJ Wagenmakers, KPJ Braun, FE Jansen, WM Otte (2025). Continuous outcome estimation in N-of-1 trials for accelerated decision-making. *medRxiv Preprint*.
-  A Hardaker, I Asanov, **F Bartoš**, SB Bruns (2025). No evidence for effectiveness of behavioral interventions to mitigate climate change after adjusting for publication bias. *IAR Discussion Paper Series*, 263.
-  **F Bartoš**, WM Otte, QF Gronau, B Timmers, A Ly, EJ Wagenmakers (2023). Empirical prior distributions for Bayesian meta-analyses of binary and time to event outcomes. *arXiv Preprint*.
-  **F Bartoš**, EJ Wagenmakers, CH Vinkers, KPJ Braun, WM Otte (2023). Contextual aggregation and rapid updating of trial outcomes within a user-friendly open-source environment. *arXiv Preprint*.

-  **F Bartoš**, M Maier, TD Stanley, EJ Wagenmakers (2022). Adjusting for publication bias reveals mixed evidence for the impact of cash transfers on subjective well-being and mental health. *PsyArXiv Preprint*.
-  **F Bartoš**, S Pawel, EJ Wagenmakers (2022). When evidence and significance collide. *arXiv Preprint*.
-  M Maier, **F Bartoš**, M Oh, EJ Wagenmakers, DR Shanks, AJL Harris, ... (2022). Adjusting for publication bias reveals that evidence for and size of construal level theory effects is substantially overestimated. *PsyArXiv Preprint*.
-  E Efendic, **F Bartoš**, MA Vranka, Š Bahník (2019). Unpacking the justifiability of dishonesty: Behavioral and process-tracing investigation. *PsyArXiv Preprint*.

Software

My research output includes the development of open-source R packages for statistical analysis. These packages enable scientific practitioners to apply the developed methodology in practice.

- [CRAN] **PublicationBiasBenchmark**: Benchmark for Publication Bias Correction Methods
- [CRAN] **RoBMA**: Robust Bayesian Meta-Analysis
- [CRAN] **zcurve**: Z-Curve 2.0: Estimating Replication Rates and Discovery Rates
- [CRAN] **BayesTools**: Tools for Bayesian Analyses
- [CRAN] **IRR2FPR**: IRR2FPR: Computing False Positive Rate from Inter-Rater Reliability
- [CRAN] **RoBSA**: Robust Bayesian Survival Analysis
- [CRAN] **RoBTT**: Robust Bayesian T-Test
-  **Meta-Analysis (JASP)**: Meta-Analysis Module for JASP
-  **Mixed Models (JASP)**: Survival Module for JASP
-  **Survival (JASP)**: Mixed Models Module for JASP
-  **Learn Bayes (JASP)**: Learn Bayes Module for JASP

Teaching

- 2022-2025 **Meta-Analysis**: Instructor/Course Coordinator; Graduate Course; University of Amsterdam
- 2021-2026 **Bayesian Inference for Psychology**: Assistant; Graduate Course; University of Amsterdam
- 2021-2022 **Good Research Practices**: Assistant; Graduate Course; University of Amsterdam
- 2019-2020 **Statistická analýza dat (Statistical analysis of data)**: Teaching Assistant; Graduate Course; Faculty of Arts, Charles University
- 2019-2020 **New Statistics and Other Actual Trends in Applied Data Analysis**: Teaching Assistant; Graduate Course; Faculty of Arts, Charles University
- 2018 **Introduction to Bayesian data analysis**: Lecturer; Guest Lecture; Faculty of Arts, Charles University
- 2018-2019 **Výzkumný seminář v experimentální sociální psychologii (Research Seminar in Experimental Social Psychology)**: Teaching Assistant; Undergraduate Course; Faculty of Arts, Charles University

Supervision

- 2024-2025 **Bachelor's Thesis**: A Stefanów, M Serry, O Piestrak, E Koskinen, W Brenner - When are Bayesians going to take over the world? Literature review of Bayesian statistics in psychological research; University of Amsterdam
- 2022-2023 **Bachelor's Thesis**: A Sahrani, D Klein Leunk, PY Gui, D Voss, K Ullah - How fair is a fair coin flip (published as Fair coins tend to land on the same side they started: Evidence from 350,757 flips); University of Amsterdam

Talks & Workshops

INVITED

- 2025 **Bayesian hypothesis testing: Concepts, benefits, and practical implementation**: Seminar in Advanced Research Methods; Department of Psychology, Princeton [recording]
- 2025 **Bayesian methods workshop**: Statistics & Methodology Platform; Swiss Clinical Trial Organisation (SCTO), Bern
- 2025 **Ig Nobel night**: Nemo, Amsterdam
- 2025 **Ig Nobel night**: EPFL, Lausanne
- 2024 **Analyzing data with JASP: A free, open-source, and user-friendly statistical software**: Methods for Evidence Synthesis Salon; University of Bristol; remote
- 2023 **Analyzing data with JASP: A free, open-source, and user-friendly statistical software**: Department of Statistics, Texas A&M College Station

- 2023 **Accounting for publication bias with robust Bayesian meta-analysis:** Statistical and Machine Learning Approaches for the Social Sciences; University of Washington; remote
- 2022 **Informed Bayesian (model-averaged) survival analysis:** International Society For Clinical Biostatistics; ČR; remote
- 2022 **Robust Bayesian meta-analysis:** University of Groningen; remote
- 2021 **Bayesian meta-analysis with JASP:** DE-PASS; remote

TALKS

- 2025 **Fast and efficient robust Bayesian meta-analysis with spike-and-slab priors:** International Meeting of Psychometric Society; Minneapolis
- 2025 **Fast and efficient robust Bayesian meta-analysis with spike-and-slab priors:** Society for Research Synthesis Methodology; Madison
- 2024 **Meta-analysis with JASP:** Society for Research Synthesis Methodology; Amsterdam
- 2024 **Bayesian model-averaged analysis of 350,757 coin flips:** Joint Statistical Meeting; Portland
- 2023 **Exploring open science practices in behavioural public policy research:** MAER-NET; Palma de Mallorca
- 2023 **Bayesian location-scale model for assessing reliability differences with ordinal ratings:** International Meeting of Psychometric Society; Baltimore
- 2023 **Robust Bayesian meta-regression: Publication bias adjusted moderator analysis:** MathPsych/ICCM/EMPG; Amsterdam
- 2023 **Adjusting for Risk of Bias in medical meta-analyses: A large-scale analysis of Cochrane Database of Systematic Reviews:** Society for Research Synthesis Methodology; Paris
- 2022 **Tutorial on robust Bayesian meta-analysis in JASP and R:** MAER-NET; Kyoto
- 2022 **Adjusting for publication bias with Bayesian model-averaging and the RoBMA R package:** ESMARConf; Online
- 2021 **No need to choose: Robust Bayesian meta-analysis:** MAER-NET; Piraeus
- 2021 **Extending RoBMA with PET-PEESE: Mitigating publication bias with Bayesian model averaging:** International Meeting of Psychometric Society; Online
- 2021 **No need to choose: Extending robust Bayesian meta-analysis by model-averaging across different publication selection models:** Quantitative Analysis of Publication Bias; Konstanz
- 2021 **Robust Bayesian meta-analysis: A framework for addressing publication bias with model-averaging:** Seminar in psychometrics; Prague
- 2019 **A minority deliberately cheats for one's own and other's benefit: An investigation of dicehonesty using mouse tracking:** Prague Conference on Behavioral Sciences; Prague
- 2019 **Jak měřit podobnost fotografií pomocí neuronových sítí?:** Kognitivní škola; Malá Skála
- 2018 **Recognition of abilities in random noise: People are willing to pay for the illusion of success:** Prague Conference on Behavioral Sciences; Prague

WORKSHOPS

- 2025 **State-of-the-art meta-analysis using JASP:** Amsterdam

Funding, Awards & Scholarships

FUNDING

- 2024 **Valorisation Grant:** Enabling Meta-Analytic SEM via JASP; 9.955 EUR; together with S Jak and M Cheung; Social and Behavioural Data Science Centre, University of Amsterdam

AWARDS

- 2025 **Student Travel Award:** International Meeting of Psychometric Society
- 2024 **Ig Nobel Prize in Probability:** For Fair coins tend to land on the same side they started: Evidence from 350,757 flips; Ig Nobel Awards
- 2024 **OSCAwards for Transparency, Metascience, Preregistration, and Reproducibility:** For A 27-country test of communicating the scientific consensus on climate change, together with B Večkalov and SJ Geiger; Open Science Community Amsterdam
- 2023 **Pineapple Science Award: Mathematics Award:** For Fair coins tend to land on the same side they started: Evidence from 350,757 flips; Pineapple Science Awards

SCHOLARSHIPS

- 2022 **COST Action Virtual Mobility Grant:** For Performing (Bayesian) meta-analysis with JASP; COST Action CA19101
- 2022 **Doktorandská prémie ISCB ČR:** For Informed Bayesian (model averaged) survival analysis; International Society For Clinical Biostatistics: ČR
- 2019 **Student Scientific Scholarship:** For project Rozvoj metody z-curve pro odhadování důvěryhodnosti vědeckých studií (Development of z-curve for estimation of trustworthiness of research); Faculty of Arts, Charles University
- 2019 **Specific University Research Scholarship:** For project Porovnání metod pro odhad rozdílů ve shodách posuzovatelů (Comparison of methods for estimating differences in inter-rater reliability); Faculty of Arts, Charles University
- 2018 **Student Scientific Scholarship:** For project Můžeme důvěřovat výzkumům o podvádění? (Can we trust research on lying); Faculty of Arts, Charles University
- 2018 **Scholarship of Special Consideration:** For active participation at Society for Judgement and Decision making, New Orleans; Faculty of Arts, Charles University
- 2018 **Scholarship of Special Consideration:** For active participation at StanCon Helsinki; Faculty of Arts, Charles University
- 2017 **Merit Scholarship:** Faculty of Arts, Charles University
- 2016 **Merit Scholarship:** Faculty of Arts, Charles University

Service

ORGANIZATION

- 2025 **Discovering Statistics using JASP:** Together with H Godmann, J van Doorn, and EJ Wagenmakers part of the organizing committee for the workshop. The hybrid workshop is scheduled to take place June 30, 2025.
- 2025 **State-of-the-Art Meta-Analysis using JASP:** Together with H Godmann and EJ Wagenmakers, part of the organizing committee for the workshop. The hybrid workshop is scheduled to take place July 1, 2025.
- 2025 **A Crash Course in Machine Learning with JASP:** Together with Henrik Godmann, D van den Bergh, K Derks, and EJ Wagenmakers, part of the organizing committee for the workshop. The hybrid workshop is scheduled to take place July 2, 2025.
- 2025 **11th Annual JASP Workshop: Theory and Practice of Bayesian Hypothesis Testing:** Together with H Godmann, R Morey, and EJ Wagenmakers, part of the organizing committee for the two-day workshop. The hybrid workshop is scheduled to take place July 3-4, 2025.
- 2025 **Journal of Robustness Reports:** Together with A Sarafoglou, B Aczel, S Hoogeveen, C Chambers, and EJ Wagenmakers, founded the diamond open access Journal of Robustness Reports (<https://scipost.org/JRobustRep/about>). Fellow of the Editorial College for the Journal of Robustness Reports, 2025-present.
- 2024 **10th Annual JASP Workshop: Theory and Practice of Bayesian Hypothesis Testing:** Together with H Godmann, R Morey, and EJ Wagenmakers part of the organizing committee for the two-day workshop. The hybrid workshop took place July 15-16, 2024, and attracted 47 participants.
- 2024 **12th Annual JAGS and Stan Workshop: Bayesian Modeling for Cognitive Science:** Together with H Godmann, M Lee, and EJ Wagenmakers, part of the organizing committee for the one-week workshop. The workshop took place July 8-12, 2024, in Amsterdam, the Netherlands, and attracted 20 participants.
- 2023 **9th Annual JASP Workshop: Theory and Practice of Bayesian Hypothesis Testing:** Together with F Aust, C Guazzone, Š Kucharský, J van Doorn, R Morey, and EJ Wagenmakers, part of the organizing committee for the two-day workshop. The hybrid workshop took place July 15-16, 2023, and attracted 55 participants.
- 2023 **11th Annual JAGS and Stan Workshop: Bayesian Modeling for Cognitive Science:** Together with F Aust, C Guazzone, M Villarreal, L Montgomery, Š Kucharský, D van den Bergh, J van Doorn, M Lee, and EJ Wagenmakers, part of the organizing committee for the one-week workshop. The workshop took place July 10-14, 2023, in Amsterdam, the Netherlands, and attracted 37 participants.
- 2022 **8th Annual JASP Workshop: Theory and Practice of Bayesian Hypothesis Testing:** Together with L Lengersdorff, F Aust, A Sarafoglou, J Petter, S Kucharský, A Stefan, D van den Bergh, R Morey, and Eric-Jan Wagenmakers, part of the organizing committee for the two-day workshop. The hybrid workshop took place August 29-30, 2022 and attracted 55 participants.
- 2022 **10th Annual JAGS and Stan Workshop: Bayesian Modeling for Cognitive Science:** Together with L Lengersdorff, F Aust, A Sarafoglou, M Villarreal, L Montgomery, J Petter, Š Kucharský, A Stefan, J van Doorn, M Lee, and EJ Wagenmakers, part of the organizing committee for the one-week workshop. The workshop took place August 22-26, 2022, in Amsterdam, the Netherlands, and attracted 25 participants.

PEER REVIEW

- Advances in Methods and Practices in Psychological Science
- Atherosclerosis
- Behavior Research Methods
- BMC Medical Research Methodology
- Collabra
- Current Medical Research and Opinion
- Energy Economics
- Health Psychology
- International Review of Sport and Exercise Psychology
- Meta-Psychology
- Nature Human Behaviour
- Personality & Social Psychology Bulletin
- PloS One
- Psychological Methods
- Research Synthesis Methods
- Statistics in Medicine