## ***Form of exposition of scientific works***

I include here the main references worth to be considered for the Blackwell-Rosenbluth Award nomination. You may find all the references at this Github repo: https://github.com/LeoEgidi/Bayesian-papers

### ***Main published papers in refereed journals***

*Theoretical: fast and efficient relabelling methods for mixture models to get sound inferential conclusions in presence of label switching; robust mixture prior distributions to fix prior-data conflict in regression models, with mathematical justification of fewer prior-data conflict; effective sample size for a mixture prior, useful in Bayesian clinical trials when fixing/choosing the number of patient to be enrolled in a clinical design.*

- Egidi, L., Pappadà, R., Pauli, F., and Torelli, N. (2018). Relabelling in Bayesian mixture models by pivotal units. *Statistics and Computing*, 28(4), 957-969.

- Egidi, L., Pauli, F., Torelli, N. (2021) Avoiding prior-data conflict in regression models via mixture priors. *The Canadian Journal of Statistics*, 50(2), 491-510.

- Egidi, L. (2022) Effective sample size for a mixture prior. *Statistics & Probability Letters*, 183, 109335.

*Applied: sports-analytics applications extending football vanilla models; new Bayesian statistical modeling protocol for volleyball.*

- Egidi L., Gabry J.S. (2018). Bayesian hierarchical models for predicting individual performance in soccer. *Journal of Quantitative Analysis of Sports*, 14(3), 143-157.

- Egidi L., Pauli F. and Torelli N. (2018). Combining historical data and bookmakers' odds in modelling football scores. *Statistical Modelling*, 18(5-6), 436-459.

- Egidi L., Ntzoufras I. (2020) A Bayesian Quest for Finding a Unified Model for Predicting Volleyball Games. *Journal of the Royal Statistical Society (Series C)*, 69(5), 1307-1336.

- Egidi L., Torelli N. (2021) Comparing goal-based and result-based approaches in modelling football outcomes. *Social Indicators Research*, 156(2), 801-813.

- Fazia F., Egidi L., Ayoglu B., Beecham A.,, Bitti P.P., Ticca A., Nilsson P., Bernardinelli L., Berzuini C. (2019). Bayesian Mendelian Randomization for incomplete pedigree data, and the characterisation of Multiple Sclerosis proteins. EUT Edizioni Università di Trieste, ISBN: 978-88-5511-114-0. https://arxiv.org/pdf/1903.00682.pdf

***Softwares***

*R packages: pivmet, a comprehensive package for pivotal relabelling in Bayesian mixture models and robust K-means clustering; footBayes, a package to fit the most well-known football models by using Hamiltonian Monte Carlo (Stan ecosystem) and produce out-of-sample predictions from the posterior predictive distribution.*

- Egidi L., Pappadà, R., Pauli F., Torelli N. (2019). pivmet 0.4.0. Available at: https://CRAN.R-project.org/package=pivmet.

- Egidi L. (2022). footBayes 0.1.0. Available at: https://CRAN.R-project.org/package=footBayes

Leonardo Egidi