

Curriculum Vitae

FREDERIC BERTRAND



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20/01/1978

31 scientific articles
14 books + 3 books editor
10 software (on CRAN)
45 contributions to international conferences
16 consulting experiences with companies
Referee for ANR and HCERES

PROFESSIONAL EXPERIENCE

2020 - up to now **Research and doctoral supervision grants** (*Prime d'Encadrement Doctoral et de Recherche*)
2019 - up to now **University of Technology of Troyes, Troyes, France**
 Full Professor (*Professeur des Universités*)
2016 - 2020 **Research and doctoral supervision grants** (*Prime d'Encadrement Doctoral et de Recherche*)
2012 - 2016 **Reward for scientific excellence** (*Prime d'Excellence Scientifique*)
2011 - 2019 **Elected member of the Conseil National des Universités, 26th section**
2008 - 2019 **University of Strasbourg/ Department of Mathematics, Strasbourg, France**
 Assistant Professor (*Maître de Conférences*)

EDUCATION

2019 **Qualified for full professor jobs in applied mathematics.**
2018 **Habilitation thesis** (*Habilitation à diriger des recherches*), Strasbourg, France
2007 **PhD. In Applied Mathematics, specialty Statistics, Strasbourg, France**
2002 **Agrégation Mathematics** (a highly competitive French Teaching examination)
1999-2003 **Ecole normale supérieure de Lyon, Lyon, France**
 (a higher education establishment with a very highly competitive admission examination)

RESEARCH EXPERTISE

Design of experiments, Applied Modeling: Linear and Generalized Linear Models, Edgeworth Expansions, Partial Least Squares, Bootstrap Techniques, Sparse Models. Statistical Learning.

CUMULATED DOCTORAL AND POST-DOCTORAL SUPERVISION

Supervisor of five PhD students (50% each). Four post-doctoral researchers grants, a research engineer grant, two Labex PhD grants and three CIFRE PhD grants.

RECENT PUBLICATIONS

F. Bertrand, I. Aouadi, N. Jung, R. Carapito, L. Vallat, S. Bahram, M. Maumy-Bertrand, SelectBoost: a general algorithm to enhance the performance of variable selection methods, *Bioinformatics*, btaa855 (2020).

R. Carapito, I. Aouadi, ..., M. Maumy-Bertrand, F. Bertrand, ... and S. Bahram. Compatibility at amino acid position 98 of MICB reduces the incidence of graft-versus-host disease in conjunction with the CMV status, *Bone Marrow Transplantation*, (2020).

T.-A. Nengsih, F. Bertrand, M. Maumy-Bertrand, N. Meyer. Determining the Number of Components in PLS Regression on Incomplete Data. *Statistical Applications in Genetics and Molecular Biology*, 18(6), (2019).

L.-M. Fornecker, L. Muller, F. Bertrand, N. Paul, A. Pichot, R. Herbrecht, M.-P. Chenard, L. Mauvieux, L. Vallat, S. Bahram, S. Cianféroni, R. Carapito, Ch. Carapito. Multi-omics dataset to decipher the complexity of drug resistance in diffuse large B-cell lymphoma. *Scientific Report*, 9(1):895 (2019).

J. Magnanensi, F. Bertrand, M. Maumy-Bertrand et N. Meyer. A new universal resample stable bootstrap-based stopping criterion for PLS component construction. *Statistics and Computing*, 27(3): 757-774 (2017).

P. Bastien, F. Bertrand, N. Meyer, M. Maumy-Bertrand. Deviance residuals based sparse PLS and sparse kernel PLS regression for censored data. *Bioinformatics*, 31(3):397-404 (2015)