

# Curriculum Vitae

## FREDERIC BERTRAND

27 scientific articles  
12 books +1 book editor  
4 software  
35 contributions to international conferences  
15 consulting experiences with companies

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FBERTRAN@MATH.UNISTRA.FR  
01/20/1978

### PROFESSIONAL EXPERIENCE

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2016 - up to now      **Research and doctoral supervision grants** (*Prime d'Encadrement Doctoral et de Recherche*)  
2012 - 2016            **Reward for scientific excellence** (*Prime d'Excellence Scientifique*)  
2011 - up to now      **Elected member of the Conseil National des Universités, 26<sup>th</sup> section**  
2008 - up to now      **University of Strasbourg/ Department of Mathematics, Strasbourg, France**  
                                 **Assistant Professor** (*Maître de Conférences*)  
2006 - 2008            **University Louis Pasteur/ Department of Mathematics, Strasbourg, France**  
                                 **Temporary Assistant Professor** (*ATER*)

### EDUCATION

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2018                    **Habilitation thesis** (*Habilitation à diriger des recherches*), **Strasbourg , France**  
2002 - 2007            **University Louis Pasteur, Strasbourg, France**  
                                 **PhD. Applied Mathematics, specialty Statistics**  
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

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

### DOCTORAL SUPERVISION

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Supervisor of three PhD students (overall 80%, maths 100%) and one post-doctoral researchers (100%).

### RECENT PUBLICATIONS

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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).

R. Carapito, ..., F. Bertrand, ..., S. Bahram,

Matching for the non-conventional MHC-I MICA gene significantly reduces the incidence of acute and chronic GVHD. *Blood*. 128(15) :1979-1986 (2016).

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)

N. Jung, F. Bertrand, S. Bahram, L. Vallat et M. Maumy-Bertrand

Cascade: a R-package to study, predict and simulate the diusion of a signal through a temporal gene network. *Bioinformatics*, 30(4): 571-573, (2014)

F. Bertrand, N. Meyer, M. Beau-Faller, K. El Bayed, N. Izzie-Jacques, M. Maumy-Bertrand.

Regression Bêta PLS. (French) [PLS Beta regression.], *J. SFdS*, 154(3): 143-159 (2013)