

# Bruno N. Rémillard, PhD

## Recent awards and distinctions

- ✓ Fellow of the Institute of Mathematical Statistics (2019)
- ✓ Gold Medal of the Statistical Society of Canada (2019)

## Academic and Research Experience

### Full-Time Positions

- 1987–88: NSERC Postdoctoral Fellow, Cornell University, Ithaca, NY
- 1988–92: Assistant Professor, Université du Québec à Trois-Rivières (UQTR)
- 1992–96: Associate Professor, UQTR, Trois-Rivières
- 1996–2001: Professor, UQTR, Trois-Rivières
- 2001–2019: Professor, HEC Montréal
- 2019– now: Honorary Professor, HEC Montréal

### Other Appointment

- 1993–2005: Adjunct Professor, Université Laval, Québec
- 2018–2021: Adjunct Professor, Université de Sherbrooke, Québec

## Research Funding

### Current Grants

- 2020–25: NSERC Discovery Grant 27,000\$ per year
- 2014–19: NSERC Discovery Grant 33,000\$ per year
- 2014–17: FRQNT Team Research Grant 76,200\$ per year
- Team Members:* C. Genest, T. Duchesne, D.J. Dupuis, J.G. Nešlehová, B. Rémillard, L.-P. Rivest

- 2019-2020: Ministère des relations internationales et de la Francophonie du Québec 7,000\$
- Team Members:* B.R. Nasri, B.N. Rémillard, B. Abdous, O. Driss

## Graduate Supervision

### 2 Postdoctoral Fellows

- 2020: Tarik Bahraoui, Postdoctoral Fellow, Université de Sherbrooke
- 2017–18: Bouchra Nasri, Postdoctoral Fellow, McGill University, Montréal

### 5 PhD Students

- 2014: Clarence Simard, Assistant Professor, U. du Québec à Montréal
- 2017: Malek Ben Abdellatif, Lecturer, HEC Montréal
- Rim Cherif, Lecturer, HEC Montréal
- 2018: Hugo Lamarre, Vice-President Marketing, UniConsultants, Montréal
- Current: Mamadou Yamar Thioub

### 12 MSc Students

- 2014: Romain Bui, Vincent Duranceau-Desmarais, Mélanie Dussarrat
- 2015: Eugénie Chekouo, Simon Lemieux
- 2016: Marie-Claude Boisvert, Maxime Bourque, Philippe Branchini, Alexandre Chrétien
- 2017: Massimo Caccia
- 2018: Hugo Rossi, Mamadou Yamar Thioub

## Selected Peer-Reviewed Articles (23 since 2014)

1. C. Genest, J.G. Nešlehová, B. Rémillard (2014). On the empirical multilinear copula process for count data. *Bernoulli Journal*, 20, 1344–1371.
2. K. Ghoudi, B. Rémillard (2014). Comparison of specification tests for GARCH models. *Computational Statistics and Data Analysis*, 76, 291–300.
3. C. Simard, B. Rémillard (2015). Forecasting time series with multivariate copula. *Dependence Modeling*, 3, 59–82.
4. C. Genest, J.G. Nešlehová, B. Rémillard (2017). Asymptotic behavior of the empirical multilinear copula process under broad conditions. *Journal of Multivariate Analysis*, 159, 82–110.
5. B. Rémillard (2017). Goodness-of-fit tests for copulas of multivariate time series. *Econometrics*, 5, 23 pages. [[Winner of the 2018 Econometrics Best Paper Award](#)]
6. B. Rémillard, B. Nasri, T. Bouezmarni (2017). On copula-based conditional quantile estimators. *Statistics & Probability Letters*, 128, 14–20.
7. K. Ghoudi, B. Rémillard (2018). Serial independence tests for innovations of conditional mean and variance models. *TEST*, 27, 3–26.
8. A. Bishop, P. Del Moral, K. Kamatani, B. Rémillard (2019). On one-dimensional Riccati diffusions. *The Annals of Applied Probability*, 29, 1127–1187.
9. C. Genest, J.G. Nešlehová, B. Rémillard, O.A. Murphy (2019). Testing for independence in arbitrary distributions. *Biometrika*, 106, 47–68.
10. C. Simard, B. Rémillard (2019). Pricing European options in a discrete time model for the limit order book. *Methodology and Computing in Applied Probability*, 21 (3), 985–1005.
11. B.R. Nasri, B.N. Rémillard (2019). Copula-based dynamic models for multivariate time series. *Journal of Multivariate Analysis*, 172, 107–121.
12. B.R. Nasri, B.N. Rémillard, T. Bouezmarni (2019). Semi-parametric copula-based models under non-stationarity. *Journal of Multivariate Analysis*, 173, 347–365.
13. J. Chávez-Casillas, R.J. Elliott, B. Rémillard, A.V. Swishchuk (2019). A level-1 limit order book with time dependent arrival rates. *Methodology and Computing in Applied Probability*, 21 (3), 699–719.
14. B.R. Nasri, B.N. Rémillard, M.Y. Thioub (2020). Goodness-of-fit for regime-switching copula models with application to option pricing. *Canadian Journal of Statistics*, 48 (1), 79–96.
15. B.R. Nasri, E. Boucher, L. Perreault, B.N. Rémillard, D. Huard, A. Nicault (2020). Modeling hydrological inflow persistence using paleoclimate reconstructions on the Québec-Labrador (Canada) peninsula. *Water Resources Research*, 56(5), e2019WR025122. [[Online Version](#)]

### **Selected Refereed Papers Published in Books or Conference Proceedings (4 since 2014)**

16. B. Rémillard, B. Nasri, M. Ben Abdellatif (2018). Replication methods for financial indexes. In *Innovations in Insurance, Risk- and Asset Management*, K. Glau, D. Linders, A. Min, M. Scherer, L. Schneider, R. Zagst (Eds). World Scientific, 421–448.
17. A. Swishchuk, B. Rémillard, R. Elliott, J. Chávez-Casillas (2019). Compound Hawkes processes in limit order books. In *Financial Mathematics, Volatility and Covariance Modelling*, vol. 2, J. Chevallier, S. Goutte, D. Guerreiro, S. Saglio, B. Sanhaji (Eds). Routledge, Abingdon, UK, 191–214.