

# Alexandre Thiéry

## ACADEMIC HISTORY

Assistant Professor, National University of Singapore	Since 2014
Postdoctoral Fellow, National University of Singapore	2013-2014
PhD in Statistics, University of Warwick (UK), Supervision: G.O. Roberts and A. Stuart	2009-2013
Ecole Normale Supérieure (Paris)	2005-2009
Research Assistant, Statslab (Cambridge, UK)	2009
DEA (Probability and Finance), Paris VI	2008
DEA (Partial Differential Equations), Paris VI	2007

## RESEARCH INTERESTS

Monte-Carlo methods, Uncertainty quantification, Inverse problems, Variational Inference, Deep-Learning

## AWARDS

NUS Young Scientist Award. (NUS Faculty of Science: 1 awardee per year)	2017
NUS Young Investigator Award. (NUS Faculty of Science: 3 awardees per year)	2016

## PUBLICATIONS

1. Verbois, H., Rusydi, A. and Thiéry, A., Probabilistic forecasting of day-ahead solar irradiance using quantile gradient boosting *Solar Energy*, Published
2. Devalla, S.K., Renukanand, P.K., Sreedhar, B.K., Perera, S., Mari, J.M., Chin, K.S., Tun, T.A., Strouthidis, N.G., Aung, T., Thiery, A.H., and Girard, M.G.A, DRUNET: A Dilated-Residual U-Net Deep Learning Network to Segment Optic Nerve Head Tissues in Optical Coherence Tomography Images *Biomedical Optics Express*, In Press
3. Beskos, A., Roberts, G., Thiéry, A.H. and Pillai, N., Asymptotic analysis of random-walk Metropolis on ridged densities, *Annals of Applied Probability*, In Press
4. Devalla, S.K., Mari, J.M, Tun, T.A, Strouthidis, N.G, Aung, T., Thiery, A.H and Girard M.J.A., A Deep Learning Approach to Digitally Stain Optical Coherence Tomography Images of the Optic Nerve Head *Investigative Ophthalmology & Visual Science*, In Press
5. Paulin, D, Jasra, A. and Thiéry, A.H., Error Bounds for Sequential Monte Carlo Samplers for Multimodal Distributions, *Bernoulli*, In Press
6. Vogt, T., Han, J., Thiéry, A.H and Li, W., Levy statistics of interacting Rydberg gases , *Physical Review A*, In Press
7. Sherlock, C., Thiéry, A.H. and Lee, A. (2017) Pseudo-marginal Metropolis–Hastings using averages of unbiased estimators, *Biometrika*, In Press
8. Sen, D., Thiéry, A.H and Jasra, A. (2017) On the Coupling of Particle Filter Trajectories, *Statistics and Computing*, In Press
9. Chuangsuwanich, T., Birgersson, K.E., Thiéry A.H., Thakku, S.G., Leo, H.L., Girard M.J.A. (2016) Factors influencing Lamina Cribrosa Microcapillary Hemodynamics and Oxygen Concentrations, *Investigative Ophthalmology and Visual Science (2016)*, In Press

10. Teh, Y.W., Thiéry, A.H., Vollmer, S. (2016) Consistency and fluctuations for stochastic gradient Langevin dynamics, *Journal of Machine Learning Research*, Volume 17, Number 7, pp 133.
11. Beskos, A., Jasra, A. and Thiéry, A.H. (2016) On the Convergence of Adaptive Sequential Monte Carlo Methods, *Annals of Applied Probability*, Volume 26, Number 2 ,pp 1111-1146.
12. Jacob, P.E., Thiéry, A.H. (2015) On non-negative unbiased estimators, *Annals of Statistics*, Volume 43, Number 2, pp 769-784.
13. Sherlock, C., Thiéry, A.H., Roberts, G.O., and Rosenthal, J.S. (2015) On the efficiency of pseudo-marginal random walk Metropolis algorithms, *Annals of Statistics*, Volume 43, Number 1, pp 238-275.
14. Pillai, N.S., Stuart, A.M. and Thiéry, A.H. (2014) Gradient Flow from a Random Walk in Hilbert Space, *Stochastic Partial Differential Equations: Analysis and Computations*, Volume 2, Number 2, pp 196-232
15. Pillai, N.S., Stuart, A.M. and Thiéry, A.H. (2012) Optimal Scaling and Diffusion Limits for the Langevin Algorithm in High Dimensions, *Annals of Applied Probability*, Volume 22, Number 6, pp 2320-2356.