

Point Process Publications

Solo Lab, EE, UNSW Sydney.

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JOURNAL PAPERS

2000s

- (1) Barbieri R, Frank LM, Quirk MC, Solo V, Wilson MA, Brown EN. Construction and analysis of non-Gaussian models of neural spiking activity. *Neurocomputing* 2002, vol 44-46, pp309-314.
- (2) Frank LM, Eden UT, Solo V, Wilson MA, Brown EN. Contrasting patterns of receptive field plasticity in the hippocampus and the entorhinal cortex: an adaptive filtering approach. *Journal of Neuroscience* 2002;22:3817-30.
- (3) Barbieri R, Frank L M, Nguyen D P, Quirk M C, Solo V, Wilson M A, Brown E N. Dynamic Analyses of Information Encoding in Neural Ensembles. *Neural Computation*. 2004-16:277-307.
- (4) Eden UT, Frank LM, Barbieri R, Solo V, Brown EN, Dynamic Analysis of Neural Encoding by Point Process Adaptive Filtering, *Neural Computation* 16, pp 971998 (2004).

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- (5) V Solo, Averaging Analysis of a Point Process Adaptive Algorithm, *Jl Appl Prob.*, 2004-41A:361-372.
- (6) V Solo and S Pasha, A Test for Independence between a Point Process and an Analog Signal, *Jl. Time Series* (2012), 33, pp 824-840.
- (7) V. Solo and S. Pasha, Point-Process Principal Components Analysis via Geometric Optimization, *Neural Computation*, Vol. 25, No. 1, pp 101-122, 2013.

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- (8) Truncated Hawkes point process modeling: System theory and system identification, *Automatica*, vol. 113, 16pp, 2020.

IEEE REFEREED CONFERENCE PAPERS

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- (1) V. Solo, E. Brown, Adaptive Neural Encoding, *proc. Annual Joint IEEE BMES/EMBS Meeting, Atlanta, Georgia, October 13-16, 1999.*

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- (2) V. Solo, 'Unobserved' Monte Carlo method for identification of partially observed nonlinear state space systems, Part II: Counting process Observations. *Proc. 39th IEEE CDC, Sydney Australia, December 2000.*
- (3) Solo V, System Identification with Analog and Counting Process Observations I: Hybrid Stochastic Intensity and Likelihood Ratios. *Proc 44th IEEE CDC*, pp 3105-3110, Seville, Spain, Dec 2005.
- (4) Solo V, System Identification with Analog and Counting Process Observations II: Mutual Information. *Proc 44th IEEE CDC*, pp 3237-3242, Seville, Spain, December 2005.
- (5) Solo V, Mutual Information between Random processes from High-Dimensional Data. *Proc IEEE ICASSP 2006*, pp III:708-711, Toulouse, France, May 2006.
- (6) Solo V, High Dimensional Point process System Identification: PCA and Dynamic Index Models. *Proc IEEE CDC*, pp829-833, San Diego, CA, USA, December 2006.
- (7) Solo V, Likelihood functions for multivariate point processes with coincidences. *Proc IEEE Conf on Decision and Control*, pp4245-4250, New Orleans, December 2007.

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- (8) V Solo and A Pasha, Testing for Independence between a point process and an Analog Signal, *Proc IEEE ICASSP, Dallas Texas*, pp 3762-3765, March 2010.
- (9) S.A. Pasha and V Solo, Computing the Trajectory Mutual Information Between a Point Process and an Analog Stochastic Process, *34th Annual International Conference of the IEEE EMBS San Diego, California USA, 28 August - 1 September, 2012*, pp 4603-4606.
- (10) A Pasha, V Solo, Hawkes-Laguerre Reduced Rank Model for Point Processes, *Proc IEEE ICASSP*, pp 6098-6102, Vancouver, May 2013.

- (11) V Solo, Hawkes-Laguerre Dynamic Index Models for Point Processes, Proc IEEE Conference on Decision and Control, Florence, Italy, 2013, pp 7028-7033.
- (12) SA Pasha, V Solo, Topology Identification of Dynamic Point Process Networks, Proc IEEE ICASSP, Florence Italy, 2014, pp 375-378.
- (13) A Pasha, V Solo, Topology Identification for Sparse Dynamic Point Process Networks, Proc IEEE CDC, Los Angeles, pp 1786-1791, Dec. 2014.
- (14) S.A. Pasha, V. Solo, Distributed Topology Identification for Point Process Dynamic Networks, Proc IEEE ICASSP, Brisbane, pp 3681-3685, April 2015.
- (15) V. Solo, B. Godoy, Time-varying Vector Poisson Processes with Coincidences, Proc IEEE ICASSP, pp 4170-4174, April 2015.
- (16) A Pasha, V Solo, Distributed Topology Identification for Sparse Point Process Dynamic Networks, Proc IEEE CDC, Osaka, Japan, pp 3379-3384, Dec. 2015.
- (17) B. Godoy, V Solo, Maximum Likelihood identification for Hawkes-Pham models with guaranteed stability condition, Proc IEEE CDC, Osaka, Japan, pp 3373-3378, Dec. 2015.
- (18) B.I. Godoy, V. Solo, J. Min and S. A.Pasha, Local Likelihood Estimation of Time-variant Hawkes Models, Proc IEEE ICASSP, Shanghai, pp 4199-4203, March 2016.
- (19) A. Pasha, V. Solo, Sparse Topology Identification for Point Process Networks, Proc IEEE ICASSP, Calgary, pp 2196-2200, April 2018.
- (20) A. Pasha, V. Solo, Adaptive Estimation of a Vector Point Process Model, Proc. IEEE CDC, Nice, pp 2904-2909, Dec. 2019.

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- (21) S.A. Pasha, V. Solo, B. Godoy, An EM Algorithm for the Time-Variant Vector Hawkes Process, Proc. IEEE CDC, to appear, Dec. 2020.