

PUBLICATION LIST JAKOB MACKE

PEER REVIEWED JOURNAL PAPERS

14. R Haefner, S Gerwinn, **JH Macke**, M Bethge: Inferring decoding strategies from choice probabilities in the presence of correlated variability. *Nature Neuroscience* 16(2), 235242, 01 2013
13. G Schwartz*, **JH Macke***, D Amodei, H Tang, MJ Berry: Low error discrimination using a correlated population code. *Journal of Neurophysiology*, 108(4), 1069-1088, 04 2012
12. L Buesing, **JH Macke**, M Sahani: Learning stable, regularised latent models of neural population dynamics. *Network: Computation in Neural Systems*, 03 2012
11. **JH Macke**, P Berens, M Bethge, Statistical analysis of multi-cell recordings: Linking population coding models to experimental data. Editorial, *Frontiers in Computational Neuroscience* 5(35), 1-2, 07 2011
10. **JH Macke**, M Oppen, M Bethge: Common input explains higher-order correlations and entropy in a simple model of neural population activity. *Physical Review Letters* 106, 208102, 05 2011
9. **JH Macke**, S Gerwinn, L White, M Kaschube, M Bethge: Gaussian process methods for estimating cortical maps. *Neuroimage* 56(2), 570-81, 05 2011
8. S Gerwinn, **JH Macke**, M Bethge: Reconstructing stimuli from the spike times of leaky integrate and fire neurons. Focused Review, *Frontiers in Neuroscience*, 5:1, 2 2011
7. D Lyamzin, **JH Macke**, NA Lesica: Modeling population spike trains with specified time-varying spike rates, trial-to-trial variability, and pairwise signal and noise correlations. *Frontiers in Computational Neuroscience*, 4:144, 11 2010
6. S Gerwinn, **JH Macke**, M Bethge: Bayesian inference for generalized linear models for spiking neurons. *Frontiers in Computational Neuroscience*, 4:12, 05 2010
5. **JH Macke**, FA Wichmann: Estimating critical stimulus features from psychophysical data: The decision-image technique applied to human faces. *Journal of Vision*, 10(5):22, 1-24, 05 2010
4. S Gerwinn, **JH Macke**, M Bethge: Bayesian population decoding of spiking neurons. *Frontiers in Computational Neuroscience* 3(21), 1-28, 10 2009
3. **JH Macke***, P Berens*, AS Ecker, AS Tolias and M Bethge: Generating Spike Trains with Specified Correlation Coefficients. *Neural Computation* 21(2), 397-423, 02 2009
2. SP Ku, A Gretton, **JH Macke** and NK Logothetis: Comparison of Pattern Recognition Methods in Classifying High-resolution BOLD Signals Obtained at High Magnetic Field in Monkeys. *Magnetic Resonance Imaging* 26(7), 1007-1014, 09 2008
1. **JH Macke***, N Maack*, B Schölkopf, W Denk, A Borst: Contour-Propagation Algorithms for Semi-Automated Reconstruction of Neural Processes. *Journal of Neuroscience Methods* 167(2), 349-357, 01 2008

PEER REVIEWED CONFERENCE PAPERS

8. L Büsing*, **JH Macke***, M Sahani: Spectral learning of linear dynamics from generalised-linear observations with application to neural population data (NIPS), Curran Associates Inc., 2012
7. **JH Macke**, I Murray, P Latham: How biased are maximum entropy models? *Advances in Neural Information Processing Systems (NIPS)*, Curran Associates Inc., 2011
6. **JH Macke**, L Büsing, JP Cunningham, BM Yu, KV Shenoy, M Sahani: Empirical models of spiking in neural populations. *Advances in Neural Information Processing Systems (NIPS)*, Curran Associates Inc., 2011

5. **JH Macke**, S Gerwinn, L White, M Kaschube, M Bethge: Bayesian estimation of orientation preference maps. Advances in Neural Information Processing Systems (NIPS), MIT Press, Cambridge, MA 2009
4. **JH Macke**, G Zeck, M Bethge: Receptive Fields without Spike-Triggering. Advances in Neural Processing Systems (NIPS), MIT Press, Cambridge, MA 2007
3. S Gerwinn, **JH Macke**, M Seeger, M Bethge: Bayesian Inference for Spiking Neuron Models with a Sparsity Prior. Advances in Neural Processing Systems (NIPS), MIT Press, Cambridge, MA 2007
2. M Bethge, S Gerwinn and **JH Macke**: Unsupervised learning of a steerable basis for invariant image representations. Proceedings of SPIE, 2007
1. J Laub, **JH Macke**, KR Mueller and FA Wichmann: Inducing Metric Violations in Human Similarity Judgements. Advances in Neural Processing Systems (NIPS), MIT Press, Cambridge, MA 2006