

Publications about DataJoint

[1, 2, 3]

Neuroscience studies using DataJoint

[4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23]

Other studies using DataJoint

[24]

Data infrastructure papers involving DataJoint

[25]

References

- [1] D. Yatsenko, J. Reimer, A. S. Ecker, E. Y. Walker, F. Sinz, P. Berens, A. Hoenselaar, R. J. Cotton, A. S. Siapas, and A. S. Tolias, “DataJoint: managing big scientific data using MATLAB or Python,” *bioRxiv*, p. 031658, Nov. 2015.
- [2] D. Yatsenko, E. Y. Walker, and A. S. Tolias, “Datajoint: A simpler relational data model,” *arXiv preprint arXiv:1807.11104*, 2018.
- [3] E. Singer, “The data sharing problem in neuroscience.” <https://www.simonsfoundation.org/2019/10/04/the-data-sharing-problem-in-neuroscience>, 2019. Accessed: 2019-10-20.
- [4] A. Vaiceliunaite, S. Eriskien, F. Franzen, S. Katzner, and L. Busse, “Spatial integration in mouse primary visual cortex,” *Journal of neurophysiology*, vol. 110, no. 4, pp. 964–972, 2013.
- [5] R. J. Cotton, E. Froudarakis, P. Storer, P. Saggau, and A. S. Tolias, “Three-dimensional mapping of microcircuit correlation structure,” *Frontiers in neural circuits*, vol. 7, p. 151, 2013.
- [6] A. S. Ecker, P. Berens, R. J. Cotton, M. Subramaniyan, G. H. Denfield, C. R. Cadwell, S. M. Smirnakis, M. Bethge, and A. S. Tolias, “State dependence of noise correlations in macaque primary visual cortex,” *Neuron*, vol. 82, no. 1, pp. 235–248, 2014.
- [7] J. Reimer, E. Froudarakis, C. R. Cadwell, D. Yatsenko, G. H. Denfield, and A. S. Tolias, “Pupil fluctuations track fast switching of cortical states during quiet wakefulness,” *Neuron*, vol. 84, no. 2, pp. 355–362, 2014.
- [8] S. Eriskien, A. Vaiceliunaite, O. Jurjut, M. Fiorini, S. Katzner, and L. Busse, “Effects of locomotion extend throughout the mouse early visual system,” *Current Biology*, vol. 24, no. 24, pp. 2899–2907, 2014.
- [9] E. Froudarakis, P. Berens, A. S. Ecker, R. J. Cotton, F. H. Sinz, D. Yatsenko, P. Saggau, M. Bethge, and A. S. Tolias, “Population code in mouse V1 facilitates readout of natural scenes through increased sparseness,” *Nat Neurosci*, vol. 17, pp. 851–857, June 2014.
- [10] D. Yatsenko, K. Josić, A. S. Ecker, E. Froudarakis, R. J. Cotton, and A. S. Tolias, “Improved estimation and interpretation of correlations in neural circuits,” *PLoS Comput Biol*, vol. 11, no. 3, p. e1004083, 2015.
- [11] X. Jiang, S. Shen, C. R. Cadwell, P. Berens, F. Sinz, A. S. Ecker, S. Patel, and A. S. Tolias, “Principles of connectivity among morphologically defined cell types in adult neocortex,” *Science*, vol. 350, p. aac9462, Nov. 2015.
- [12] K. Q. Shan, E. V. Lubenov, M. Papadopoulou, and A. G. Siapas, “Spatial tuning and brain state account for dorsal hippocampal CA1 activity in a non-spatial learning task,” *eLife*, vol. 5, p. e14321, 2016.

- [13] C. R. Cadwell, A. Palasantza, X. Jiang, P. Berens, Q. Deng, M. Yilmaz, J. Reimer, S. Shen, M. Bethge, K. F. Tolias, *et al.*, “Electrophysiological, transcriptomic and morphologic profiling of single neurons using patch-seq,” *Nature biotechnology*, vol. 34, no. 2, pp. 199–203, 2016.
- [14] T. Baden, P. Berens, K. Franke, M. R. Rosón, M. Bethge, and T. Euler, “The functional diversity of retinal ganglion cells in the mouse,” *Nature*, vol. 529, no. 7586, pp. 345–350, 2016.
- [15] J. Reimer, M. J. McGinley, Y. Liu, C. Rodenkirch, Q. Wang, D. A. McCormick, and A. S. Tolias, “Pupil fluctuations track rapid changes in adrenergic and cholinergic activity in cortex,” *Nature communications*, vol. 7, p. 13289, 2016.
- [16] K. Franke, P. Berens, T. Schubert, M. Bethge, T. Euler, and T. Baden, “Inhibition decorrelates visual feature representations in the inner retina,” *Nature*, vol. 542, no. 7642, p. 439, 2017.
- [17] G. H. Denfield, A. S. Ecker, T. J. Shinn, M. Bethge, and A. S. Tolias, “Attentional fluctuations induce shared variability in macaque primary visual cortex,” *Nature communications*, vol. 9, no. 1, p. 2654, 2018.
- [18] F. Sinz, A. S. Ecker, P. Fahey, E. Walker, E. Cobos, E. Froudarakis, D. Yatsenko, Z. Pitkow, J. Reimer, and A. Tolias, “Stimulus domain transfer in recurrent models for large scale cortical population prediction on video,” in *Advances in Neural Information Processing Systems*, pp. 7199–7210, 2018.
- [19] M. R. Rosón, Y. Bauer, A. H. Kotkat, P. Berens, T. Euler, and L. Busse, “Mouse dlgn receives functional input from a diverse population of retinal ganglion cells with limited convergence,” *Neuron*, vol. 102, no. 2, pp. 462–476, 2019.
- [20] E. Y. Walker, F. H. Sinz, E. Cobos, T. Muhammad, E. Froudarakis, P. G. Fahey, A. S. Ecker, J. Reimer, X. Pitkow, and A. S. Tolias, “Inception loops discover what excites neurons most using deep predictive models,” *Nature neuroscience*, vol. 22, no. 12, pp. 2060–2065, 2019.
- [21] P. G. Fahey, T. Muhammad, C. Smith, E. Froudarakis, E. Cobos, J. Fu, E. Y. Walker, D. Yatsenko, F. H. Sinz, J. Reimer, *et al.*, “A global map of orientation tuning in mouse visual cortex,” *bioRxiv*, p. 745323, 2019.
- [22] S. L. Heath, M. P. Christenson, E. Oriol, M. Saavedra-Weisenhaus, J. R. Kohn, and R. Behnia, “Circuit mechanisms underlying chromatic encoding in drosophila photoreceptors,” *Current Biology*, 2020.
- [23] V. Aguilon-Rodriguez, D. E. Angelaki, H. M. Bayer, N. Bonacchi, M. Carandini, F. Cazettes, G. A. Chapuis, A. K. Churchland, Y. Dan, E. E. Dewitt, *et al.*, “A standardized and reproducible method to measure decision-making in mice,” *BioRxiv*, 2020.
- [24] L. Hartmann, P. Drewe-Boß, T. Wießner, G. Wagner, S. Geue, H.-C. Lee, D. M. Obermüller, A. Kahles, J. Behr, F. H. Sinz, *et al.*, “Alternative splicing substantially diversifies the transcriptome during early photomorphogenesis and correlates with the energy availability in arabidopsis,” *The Plant Cell*, vol. 28, no. 11, pp. 2715–2734, 2016.
- [25] N. Bonacchi, G. Chapuis, A. Churchland, K. D. Harris, C. Rossant, M. Sasaki, S. Shen, N. A. Steinmetz, E. Y. Walker, O. Winter, *et al.*, “Data architecture and visualization for a large-scale neuroscience collaboration,” *BioRxiv*, p. 827873, 2019.