Wksht 6: Reading scientific papers

When you find your data for your sensory cortex, most likely it will have resulted in a peer-reviewed publication that uses that data. It will be good for you to have some practice reading through scientific articles and grabbing the relevant information.

Together with your partner from A2, look for a paper in the cortex that you just did your presentation on. It can be one of the ones you cited for your assignment if you want, but it needs to contain some results that stem from spike-train data. It would also be useful if you see some figures that are similar to those we've seen in class so far, but it's not necessary.

Read through the paper and answer the following questions:

1. What is(are) the ***main research question(s)*** of the article? What are the authors trying to investigate?
2. ***Who is (are) the author(s***) and what are their backgrounds? (e.g. are they experimentalists, computational people? What is their degree/title? Are they in academia, a research lab, industry, etc.?)
3. Who is the ***intended audience*** of this source? To determine this, look at where it is published (e.g. if it is a journal article, look at the journal website and determine the audience).
4. What particular experiment(s) did the author(s) conduct and what kind of data did they collect?
5. Choose 2-3 figures from their paper that help illustrate one or two of their main findings. Explain, in depth, how they created those figures from spike-train data and what they tell us about the results. Pretend that you made those figures and you are explaining both how to create them (what is the procedure?) and what they mean (what is the interpretation?). This could very well mean that you are learning a new measure that we haven't talked about in class.
6. What was your overall impression of the figures in the paper? Were they visually appealing? Did they sufficiently get the point across? Are they any that you feel like you would have done differently?

Homework: You will create a short report that answers these questions. Make sure to include the figures from the paper (you can screenshot them) and thoroughly explain the interpretation of each figure.