**Code**

We used Matlab R2019a. To reproduce the figures in the manuscript, copy all the files into one folder, start matlab and navigate to the repository-folder.

cd('/Path/to/this/repo');

Then call one of these functions:

* figure1.m: graphics from Fig1 which are rasterplots, mean instantaneous firing rates and spike density.
* figure2.m: graphics from Fig2 (A-C) rasterplots, mean instantaneous firing rates and spike density
* figure2\_ensembleActivity.m: graphics from Fig2 D which are instantaneous firing rates of ensemble activity
* ensembleActivity\_clusterTest.m: performes cluster permutation test (Fig2 D)
* tTests.m: performes paired and unpaired t-tests for all units (pre vs. stimulus, odor vs. non-odor), gives number of significant units and p-values of binomialtests.

Further .m files are included because they are called by the above scripts at some point or another.

**Data**

* Figure1: data to plot example stimulus-responsive units, see Fig1, use code figure1.m
* Figure2: data to plot example odor-associated units, see Fig2 (A-C), use code figure2.m
* Fig2\_emsemble: data to plot ensemble activity (Fig2 D use code figure2\_ensembleActivity.m)
* zScores: z-scores in each of the four time windows and prestimulus interval of each trial of each unit to test for stimulus-responsive and odor-associated units, use code tTests.m
* scoresANOVA: p-Value results of t-tests for odor-associated (testOdor) and stimulus-responsive (testPre) units and table zScores with mean z-scores