SpikeForest Compares Spike Sorter Accuracy

Are you a neuroscientist who's unsure which spike sorter best suits your needs? SpikeForest — a software suite that wraps 10 popular sorters into a Python package — can guide you to the optimal choice of sorter. SpikeForest processed a large database of electrophysiological recordings with ground truth to benchmark sorter accuracy and speed. With SpikeForest you can apply multiple sorters to your own data and browse our datasets, sorters, results and more.

SpikeForest in Action

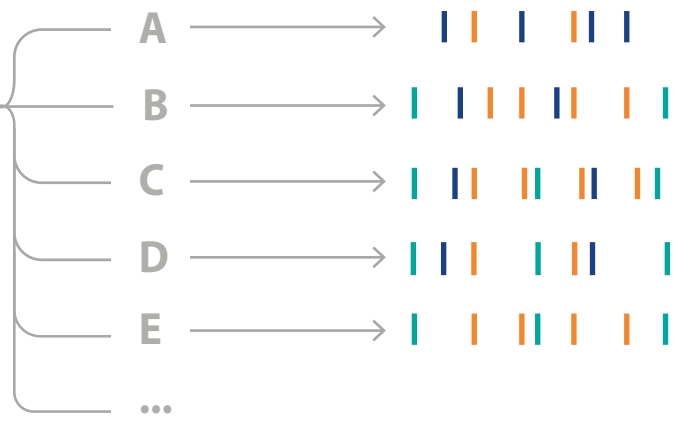**1** 650 real and synthetic recordings with ground truth were collected and run through 10 sorters.

2 All sorter outputs were compared to the relevant ground truth to count the number of faulty spikes.
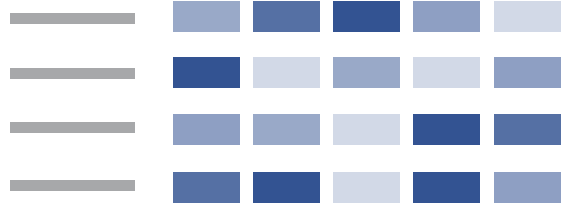
3 Recordings were grouped by features such as brain region and probe type.

Example recording

Sorters

Spike trains

A

B

C

D

E

...

Ground truth firings

Sorters

Groups   A   B   C   D   E

Lower   Accuracy   Higher

4 An interactive website compares the average accuracy of each sorter on all groups, and many more details.