Flatiron CCN Software workshop

NEUROSCIENCE 2025

Pynapple

NeMoS

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And there's more!

Pynapple:

- `randomize`: shuffle timestamps to create surrogate datasets
- `spectrum`: compute power spectral densities
- `wavelet`: compute wavelet decompositions
- `warping`: linearly warp trial-based tensors

NeMoS:

- `Observation models`:
  - `GammaObservations`: calcium imaging
  - `BernoulliObservations`: behavioral data
  - `NegativeBinomialObservations`: over-dispersed spiking data
- `Regularizers`:
  - `GroupLasso`: apply Lasso (L1) regularization group-wise
  - `ElasticNet`: combine L1 and L2 regularization

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Stay in touch

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- Especially if you use them in a context not covered here or in our documentation.

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- `neurorse@flatironinstitute.org`
- https://neurorse.flatironinstitute.org/
- pynapple:
  - https://github.com/pynapple-org/pynapple
  - https://x.com/thepynapple
  - https://bsky.app/profile/pynapple.bsky.social
  - thepynapple@gmail.com
- NeMoS:
  - https://github.com/flatironinstitute/nemos
  - https://x.com/nemos_neuro

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SfN poster

- Mon, Nov 17: 8am to 12pm
- PSTR198.13 (SDCC Halls B-H)

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Doing this again in February

Applications close Nov 20!

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Fill out survey!

https://neurorse.flatironinstitute.org/sfn-feedback/