Projects

* Infomap and ecological communities of bacteria [Farage] (Pasqualini)
* Transfer entropy and cryptocurrencies (https://coinmarketcap.com/historical/)
* Information bottleneck approach and deep networks [Saxe] (forward-forward)
* Higher-order interactions and information decomposition [Mediano] (Tentori exp./HTC)
* Hamiltonian MC and Dirichlet-Multinomial modelling (Samir)
* Bayesian Learning in Recurrent Switching Linear Dynamical Systems [Linderman] (HCP)
* Bayesian latent structure in neuron recordings (spike exp.)
* Approximate Bayes Computation on neural models [West] ( spiek sim..)

**Further Reading**

* Langsrud, A. (2020). *Inferring the learning rule from spike train data with particle Metropolis-Hastings* (Master's thesis, NTNU).
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* Barbier, J. (2020). High-dimensional inference: a statistical mechanics perspective. *arXiv preprint arXiv:2010.14863*.
* Dirichlet-multinomial modelling outperforms alternatives for analysis of microbiome and other ecological count data
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