Exploring Eco-Acoustic Data with K-Determinantal Point Processes
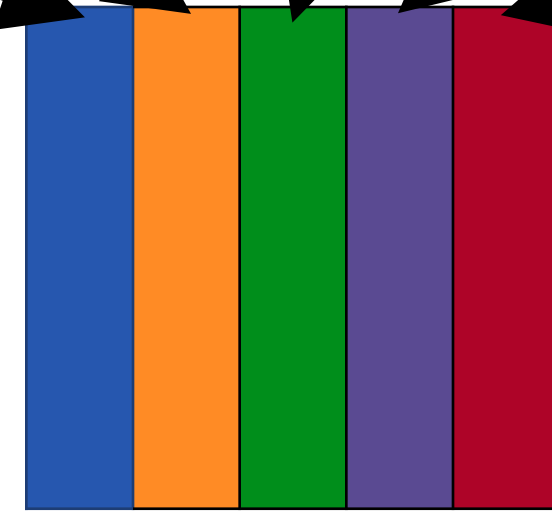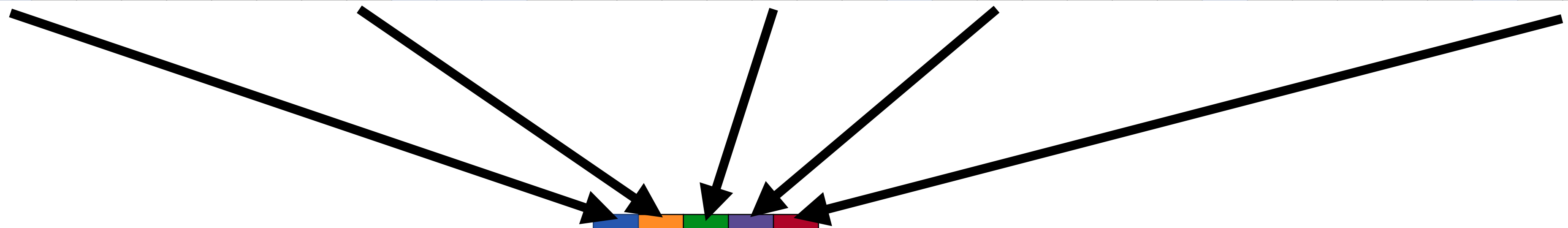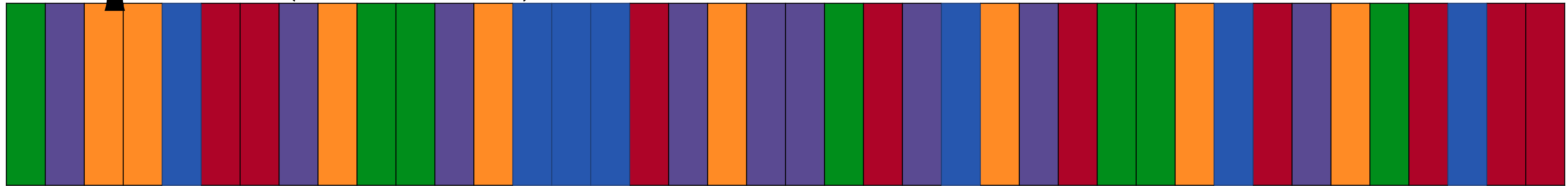

Vincent Lostanlen, CNRS, LS2N
with M. Outidrarine, P. Baudet, M. Lagrange, J. S. Ulloa

Soundscape summarization

Input (size *N*)

Output (size *K*)

K-DPP likelihood kernel

The joint probability of drawing any two samples should grow in proportion to their cosine distance in feature space.
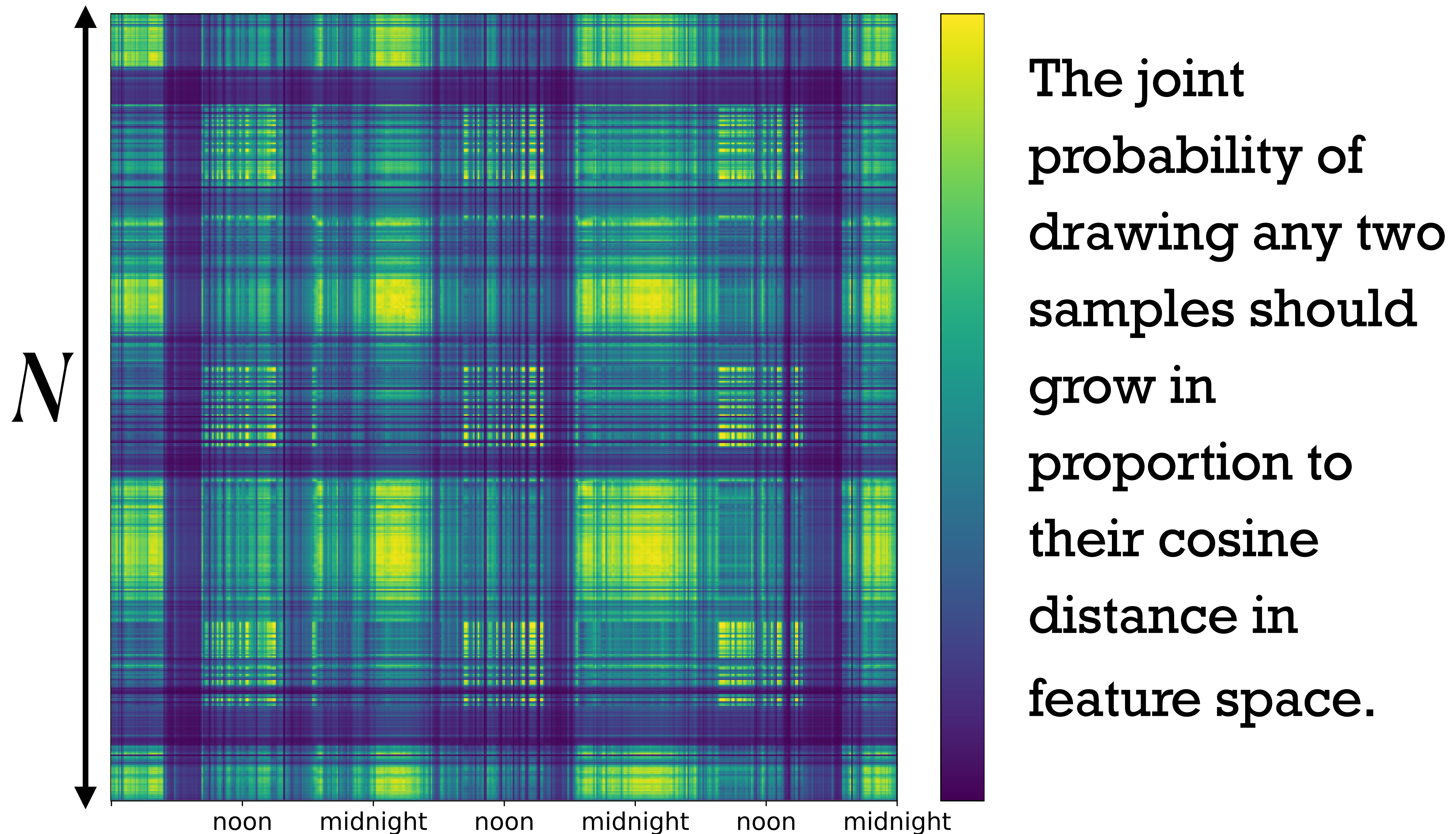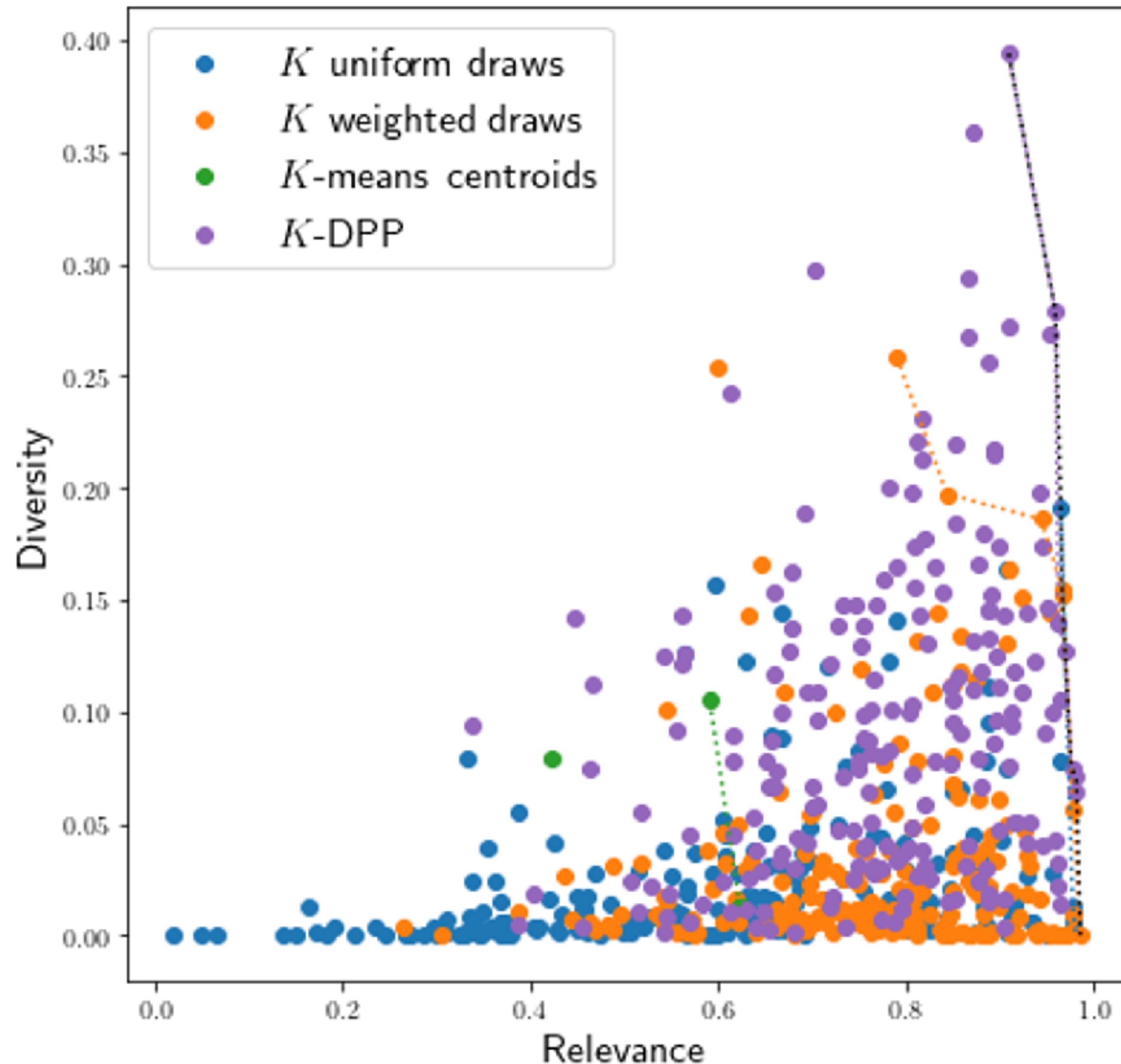
Open-source benchmark

- **DPPy** for probabilistic modeling

- **scikit-maad** for acoustical relevance

- **Kymatio** for acoustical diversity

- **BirdNET** for evaluation

Another application in mind?
Talk to me at the poster!