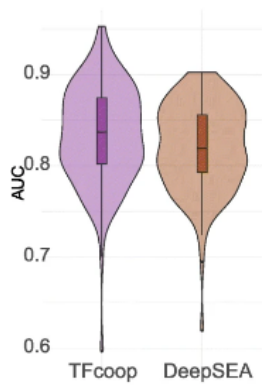


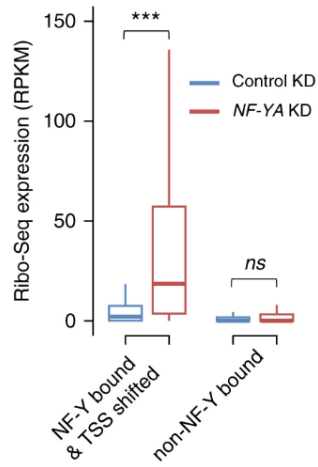
Flagship GEM : recent results

- Transcription initiation & control



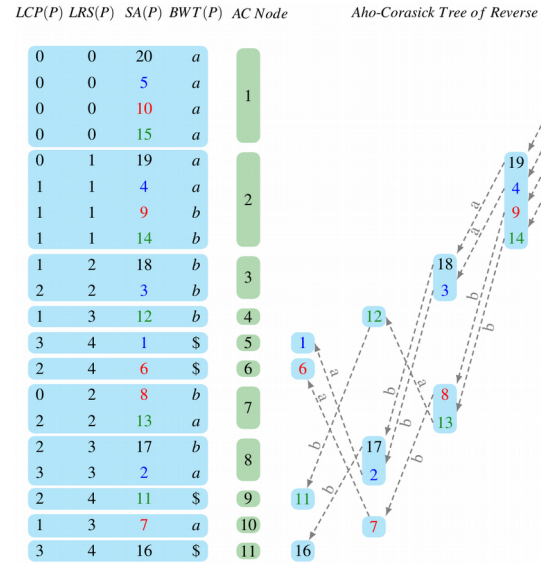
Using transcription factor combinatorics

Vandel et al, *BMC Genomics* 2019



Distinguish alternative translation starts using Ribo-seq analysis transcription
Oldfield et al, *Nature Communications* 2019

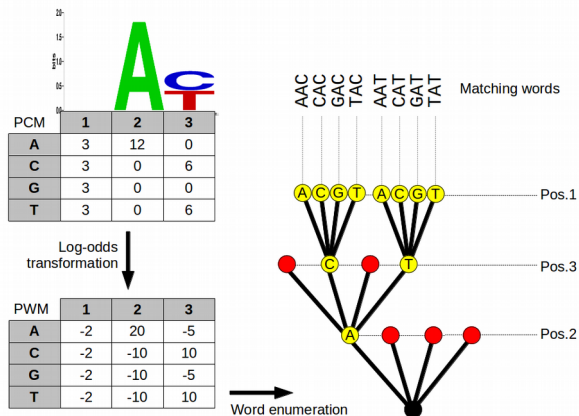
- Algorithms for sequence indexing.



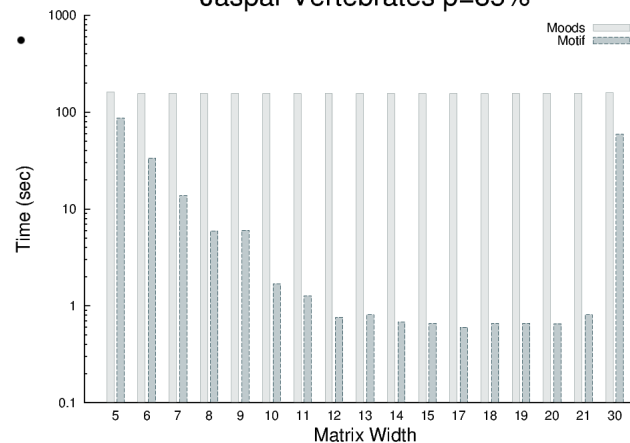
Equivalence between indexing data structures
- for collection of sequences: the multi Burrows-Wheeler Transform (BWT)
- for trees : the Extended BWT (X-BWT)

Cazaux, R., *CPM* 2019

- Probabilistic motif search in genome (poster).



Jaspar Vertebrates p=85%



Efficient enumeration and search of words matching a probabilistic motif (Position Weight Matrix).
Service on ATGC platform.

Martin et al. , *IEEE. BIBM* 2018