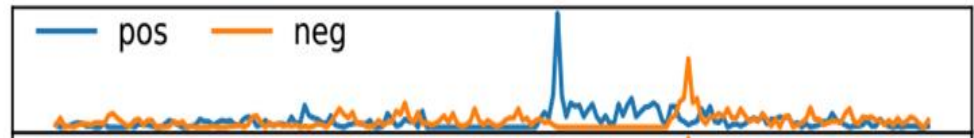
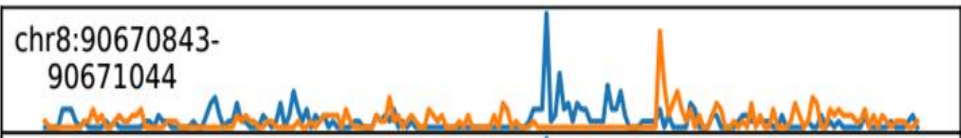


# DNNs can accurately model bp. resolution TF footprints ChIP-nexus/exo

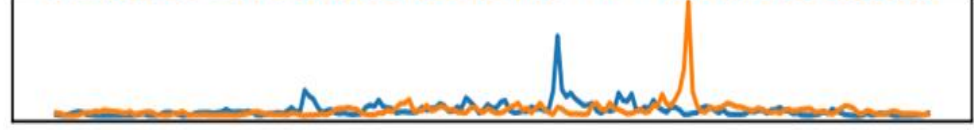
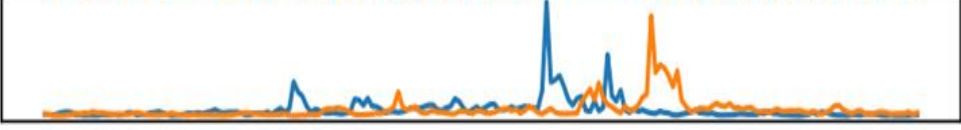
## Oct4

## Sox2

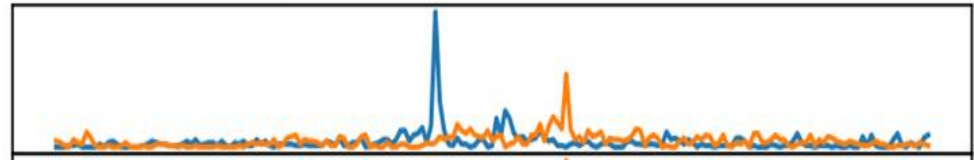
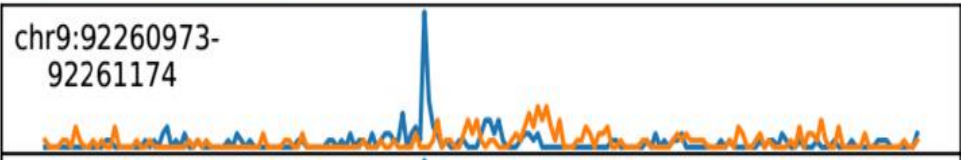
Observed



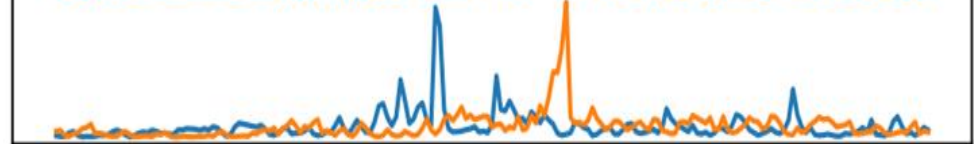
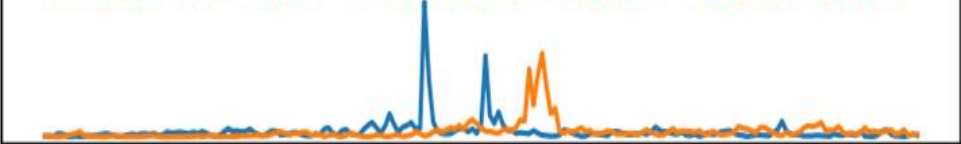
Predicted



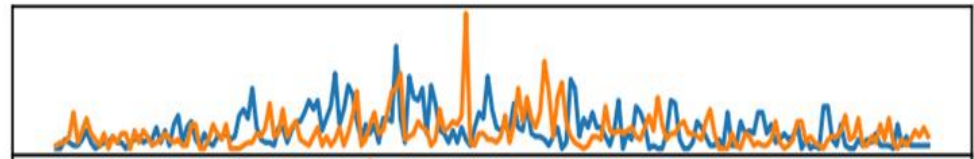
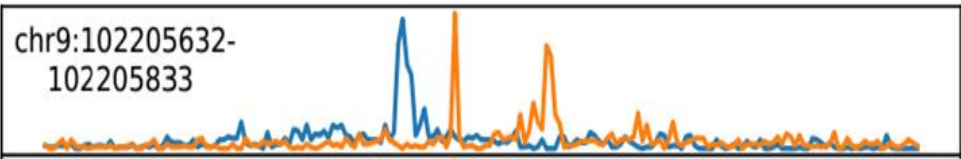
Observed



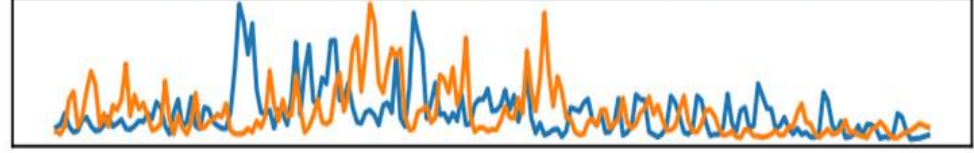
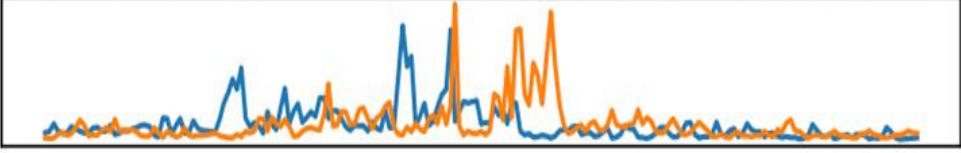
Predicted



Observed



Predicted

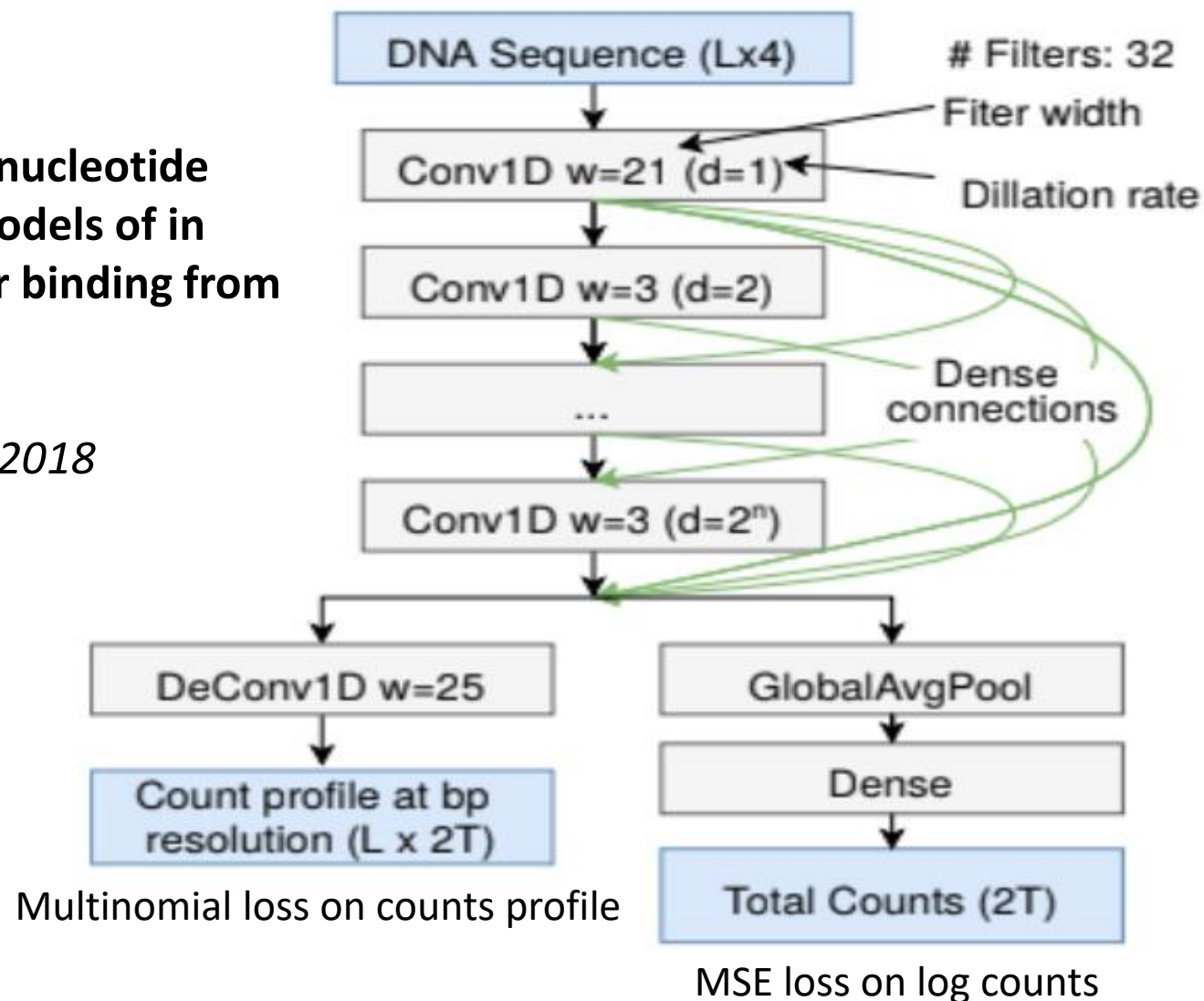


Žiga Avsec

# “BPNet” architecture from Avsec et al., 2018

**BPNet: Learning single-nucleotide resolution predictive models of in vivo transcription factor binding from CHIP-nexus data**

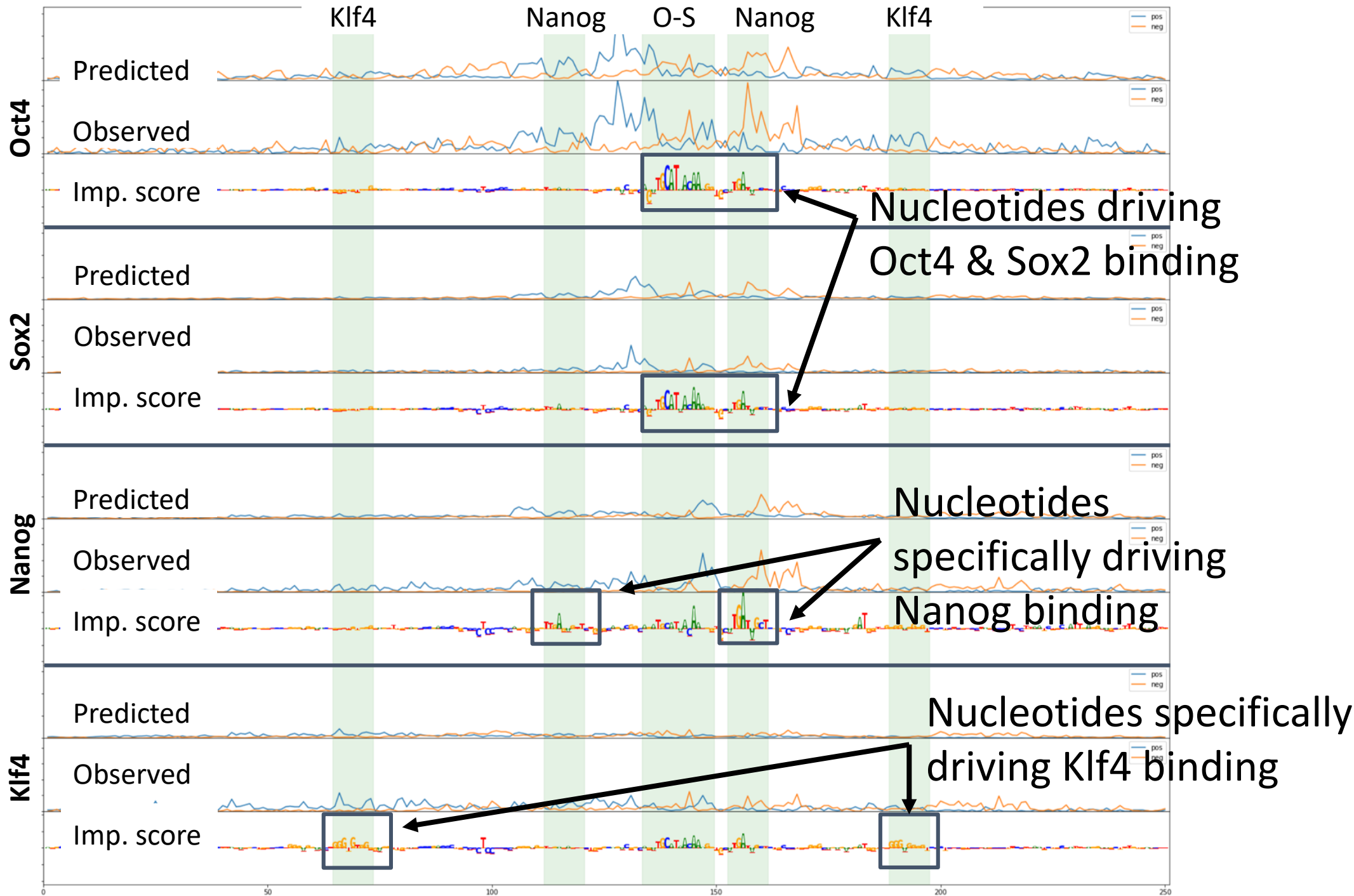
*Avsec et al., ICML WCB, 2018*



Žiga Avsec

# Oct4 Distal Enhancer

Model interpretation reveals TF-specific regulatory sequence code, supported by footprints



# BNet on ChIP-seq

