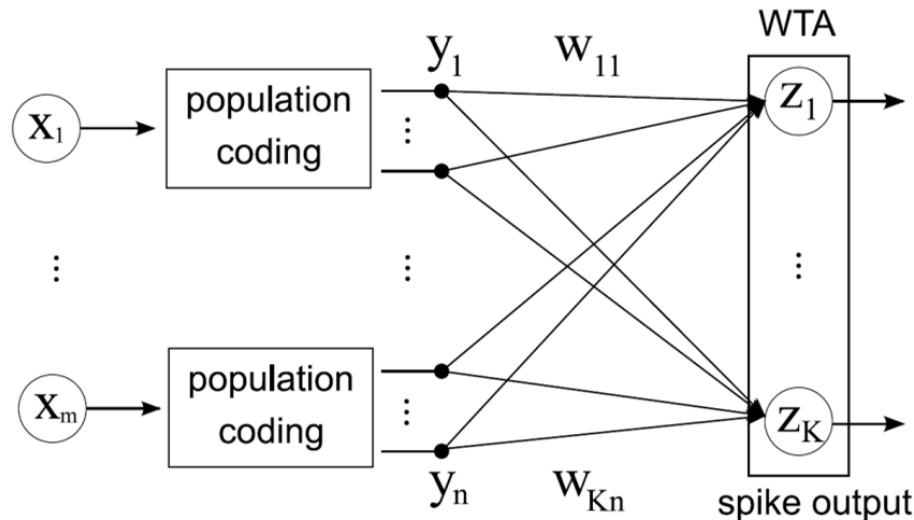


# STDP enables spiking neurons to detect hidden causes of their inputs



We prove analytically:  
STDP in a soft-WTA circuit  
on population-coded inputs  
generates a probabilistic  
clustering of spike patterns.

**STDP**  
**Soft - WTA**  
**Population Codes**

=

**Expectation  
Maximization (EM)**  
**Probabilistic Inference  
of hidden causes**