## **MP Neuron Model**

What is the mathematical model?



1. Inputs belong to a discrete set of values {0,1}
2. g aggregates the inputs and function f takes a decision based on these aggregations
3. These inputs can be excitatory or inhibitory
   1. y = 0 if xi is inhibitory (outputs zero, sort of an override), else
   2. g(x) = ni=1xi
   3. y = f(g(x))
      1. y = 1 if g(x) >= b
      2. y = 0 if g(x) < b
      3. Where b is a threshold value
      4. b is a parameter, it is adjusted with the aim of maximizing the number of correct predictions