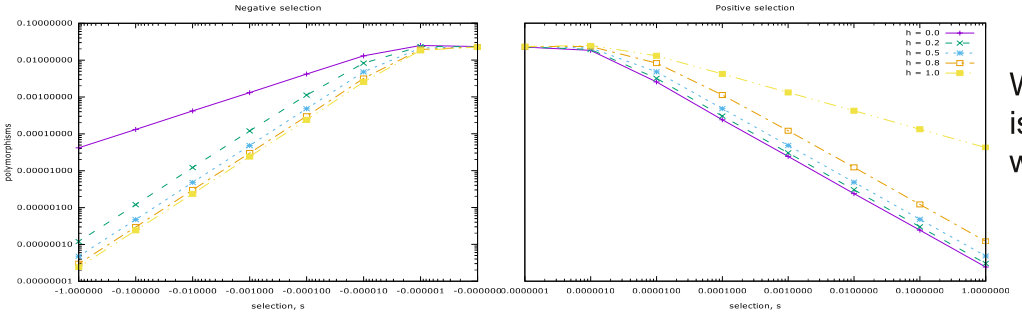
Modelling polymorphisms with selection and dominance

Polymorphisms for fixed dominance

Nomenclature

s: Selection coefficient
h: Dominance coefficient
x: Allele frequency
N: Effective population
U: Mutation rate



Polymorphisms

With random allele frequency x, it is given by E[2 x (1 - x)]
where f(x | s, h) is proportional to
exp(2Ns(x^2 + 2hx(1-x)))
* x^(4NU-1) (1-x)^(4NU-1).

Sigmoidal dominance

h(s) = 1 / (1 + e^(-beta * s))