

Measured Velocity Distribution

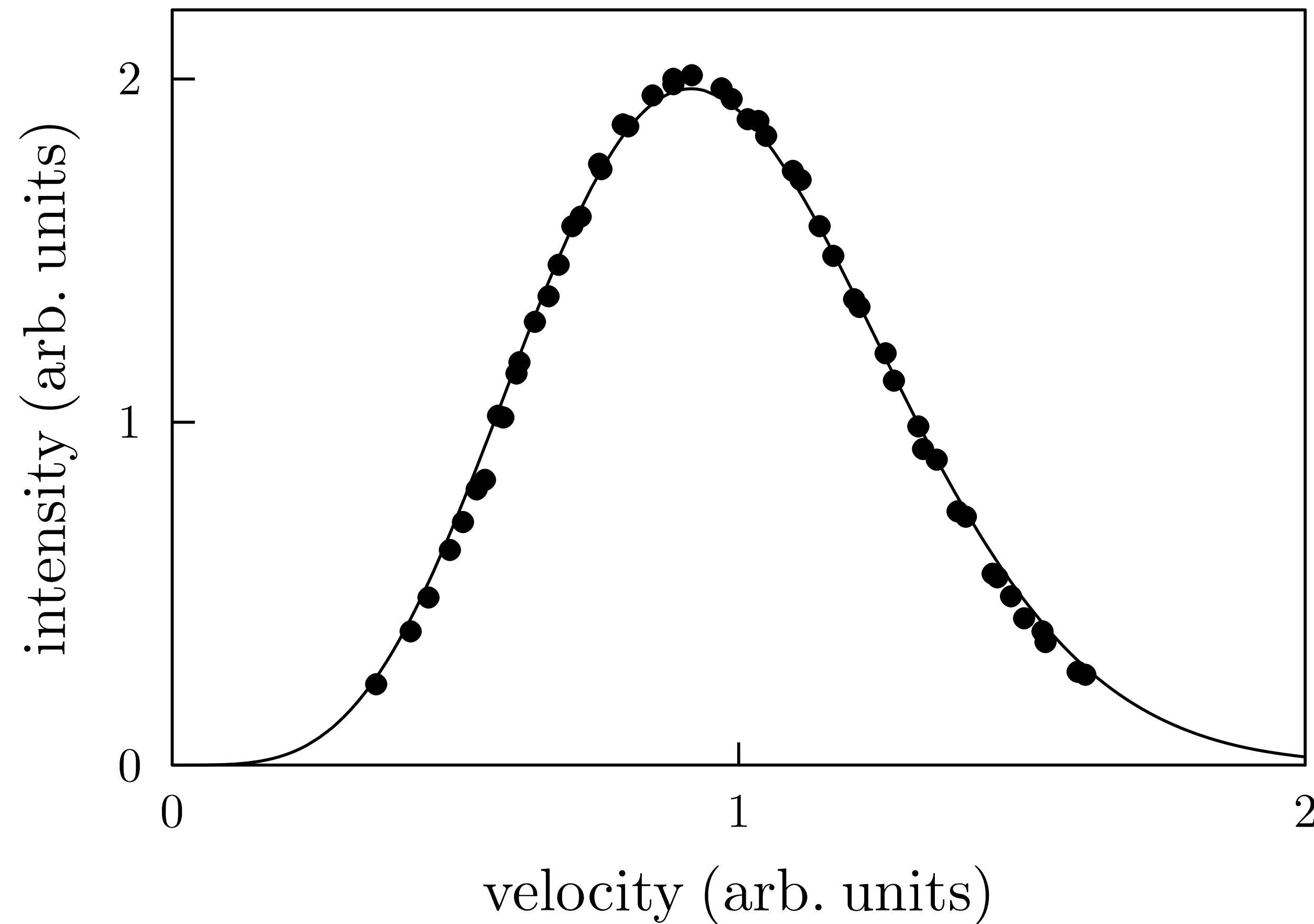
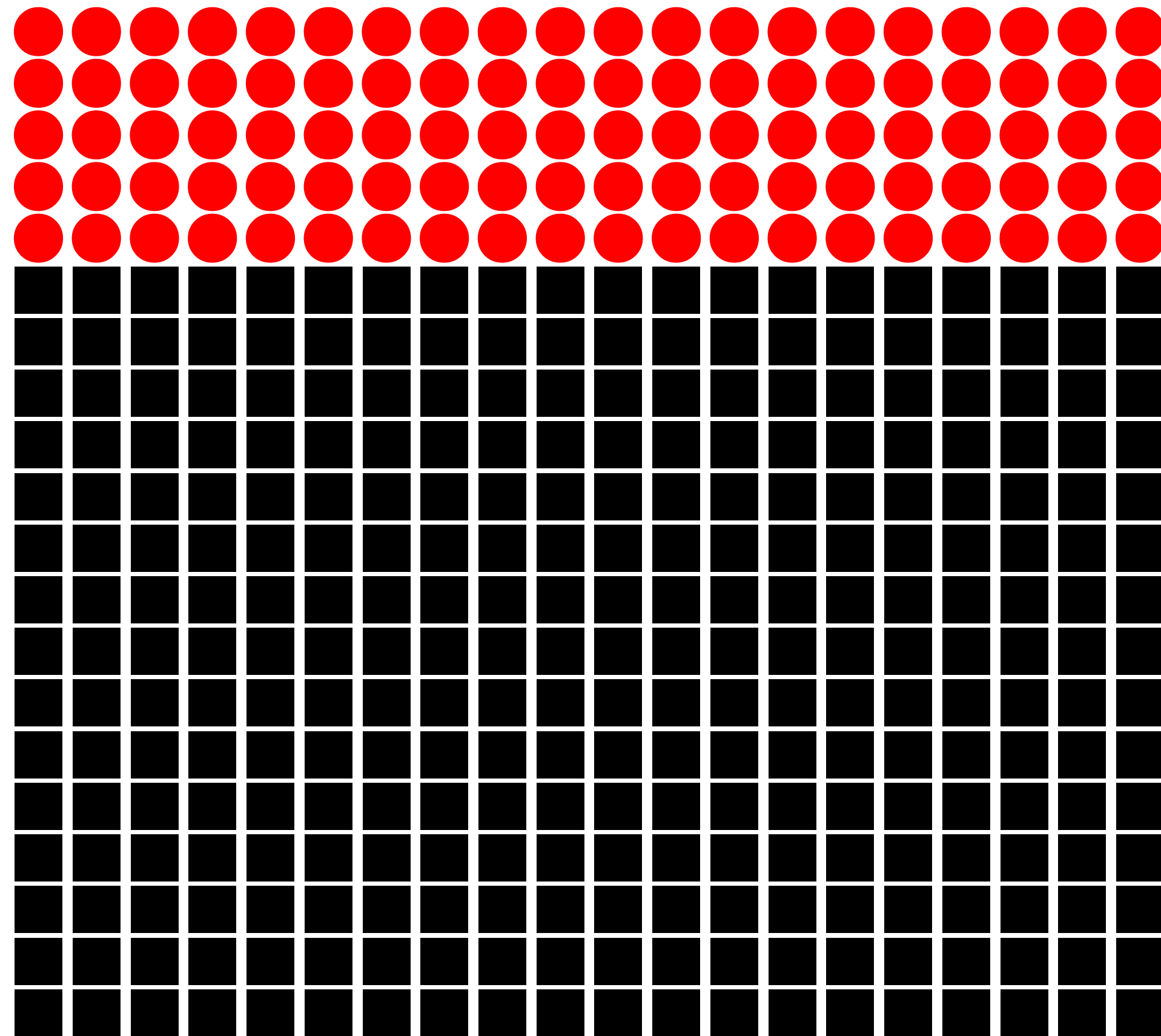


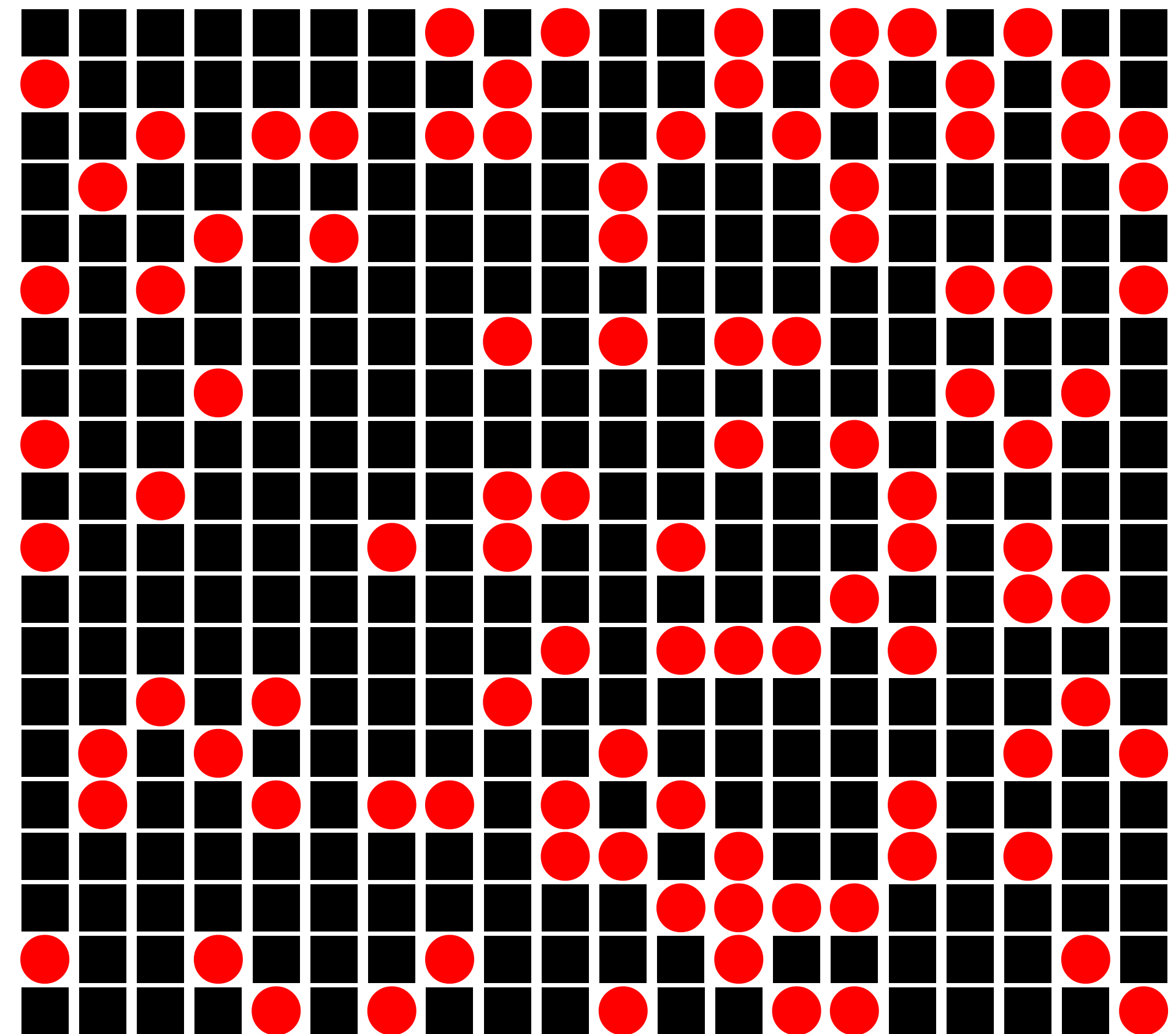
Fig. 5.7 Intensity data measured for potassium atoms using the velocity selector shown in Fig. 5.6 (from R.C. Miller and P. Kusch, Phys. Rev. **99**, 1314 (1955), Copyright (1955) by the American Physical Society). The line

Can be used to fit k_B !

Ordered versus typical state: e^{225} states in total



Ordered state: 400 atoms, $1/4$
are excited, $E = 100 \Delta$



a typical state: the
energy is still, $E = 100 \Delta$