Image Resolution.
Part I: Gaussian Distribution
Gaussian Distribution

\[ y = h \cdot e^{-\left(\frac{x-c}{w}\right)^2} \]

height: \( h = 1.0 \)
width: \( w = 2.0 \)
center: \( c = 0.0 \)
Two Gaussian distributions
Resolution of two Gaussian distributions
If two Gaussian distributions do not overlap at their FWHM, they can be individually resolved.
Resolution of two Gaussian distributions
Resolution of two Gaussian distributions

\[ |c_1 - c_2| = 2w \]

If two Gaussian distributions overlap or meet at their FWHM, they cannot be individually resolved.
Resolution of two Gaussian distributions

$|c_1 - c_2| < 2w$