Gaussian: $r(x, y; \mu, \alpha, \sigma) = \alpha e^{-\frac{(\mu_x - x)^2 + (\mu_y - y)^2}{\sigma^2}}$

Difference of Gaussians: $r(x, y; \mu, \alpha_{pos}, \alpha_{neg}, \sigma_{pos}, \sigma_{neg}) = \alpha_{pos} e^{-\frac{(\mu_x - x)^2 + (\mu_y - y)^2}{\sigma_{pos}^2}} - \alpha_{neg} e^{-\frac{(\mu_x - x)^2 + (\mu_y - y)^2}{\sigma_{neg}^2}}$

Compressive Spatial Summation: $r(x, y; \alpha, \mu, \sigma, n) = \alpha e^{-n \frac{(\mu_x - x)^2 + (\mu_y - y)^2}{\sigma^2}}$

Elliptic Gaussian: $r(x \in \mathbb{R}^2; \alpha, \mu, \Sigma \in \mathbb{R}^{2x2}) = \alpha e^{-\frac{1}{2}(x - \mu)^T \Sigma^{-1} (x - \mu)}$

Gabor wavelet (real): $g(x, y; \lambda, \theta, \phi, \gamma) = e^{-\frac{x'^2 + \gamma^2 y'^2}{2\sigma^2}} cos\left(2\pi \frac{x'}{\lambda} + \phi\right)$

Where

$$x' = x \cdot cos\theta + y \cdot sin\theta$$

$$y' = -x \cdot sin\theta + y \cdot cos\theta$$