`GaussianCoulomb[x, y, sigx, sigy]` returns the electromagnetic force $f_x + if_y$ at the coordinates (x, y), generated by a Gaussian bunch with sizes `(sigx,sigy)`$=(\sigma_x, \sigma_y)$. Its derivative at the origin is

$$\frac{\partial f_x}{\partial x} = -2\frac{x}{\sigma_x(\sigma_x + \sigma_y)}\,, \tag{201}$$

$$\frac{\partial f_y}{\partial y} = -2\frac{y}{\sigma_y(\sigma_x + \sigma_y)}\,. \tag{202}$$