

$$x \perp y \text{ pour } q \Leftrightarrow q(x+y) = q(x) + q(y)$$

! Forme polaire de q

$$q(x+y) = \phi(x+y, x+y)$$

$$= \phi(x, x) + \phi(x, y) + \phi(y, x) + \phi(y, y)$$

$$= \underset{\downarrow}{q(x)} + q(y) + 2\phi(x, y)$$

$$\text{donc } q(x+y) = q(x) + q(y) \Leftrightarrow \phi(x, y) = 0$$

$$\Leftrightarrow x \perp y$$