



BRITISH EMBASSY
BELGRADE

For C-5,

$$\|x-y\|^2 \geq 0$$

$$\Rightarrow \langle x, x \rangle - 2\langle x, y \rangle + \langle y, y \rangle \geq 0$$

$$\Rightarrow 2\langle x, y \rangle \leq \langle x, x \rangle + \langle y, y \rangle$$

can use instead!

note don't need C prod for this!

$$\|x-y\|^2$$

$$\sum a_i u(x_i) u(y_i) a_j$$

$$u(x-y)$$

$$\langle u(x) u(y) \rangle$$

$$= \sum$$

$$u_k(x-y)$$

$$u_{kl}(x-y) = (x-y)_l (x-y)_k$$

$$x_l (x_l - y_l) + y_l (y_k - x_k)$$

$$= x_l x_k - x_l y_k - x_k y_l + y_l y_k$$

$$= x_l (x_l - y_l) + y_k (y_k - x_k)$$