

# Chosen ciphertext security: definition

**Def:**  $E$  is CCA secure (a.k.a IND-CCA) if for all efficient  $A$ :

$$\text{Adv}_{\text{CCA}}[A, E] = \left| \Pr[\text{EXP}(0)=1] - \Pr[\text{EXP}(1)=1] \right| \text{ is negligible.}$$

Example: Suppose

(to: alice, body)

→

(to: david, body)

