## Propiedades de las operaciones entre conjuntos

## September 23, 2021

- $\bullet \ \forall \ x \in \mathcal{U}: \ [x \in A \quad \lor \quad x \in A^c]. \qquad \bullet \ A \cup B = B \cup A, \ A \cap B = B \cap A.$
- $\bullet \ \phi^c = \mathcal{U} \ \land \ \mathcal{U}^c = \phi.$
- $\bullet \ A \cup A^c = \mathcal{U}.$
- $\bullet \ (A^c)^c = A.$
- $\bullet \ A\cap A^c=\phi.$
- $\bullet \ A \cup A = A, \ A \cap A = A.$

- $A \cup (B \cup C) = (A \cup B) \cup C$ .
- $A \cap (B \cap C) = (A \cap B) \cap C$ .
- $A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$ .
- $\bullet \ A \setminus B = A \cap B^c. \\ \bullet \ A \cap (B \cup C) = (A \cap B) \cup (A \cap C).$ 
  - $(A \cup B)^c = A^c \cap B^c$ .
  - $\bullet \ (A \cap B)^c = A^c \cup B^c.$