

## Exercises

E3.46 [23T] (Proposed on 2022-10-11) (Solved on 2022-10-25) Prove that the definition [1W1] of intersection is well posed, using the Z-F axioms. Eventually prove also that

$$\forall x, x \in \bigcap_{i \in I} C_i \iff (I \neq \emptyset \wedge \forall i \in I, x \in C_i) \quad . \quad (3.46)$$

**Solution 1.** [23V]