

Exercises

E8.57 [OJK] Difficulty:*. Suppose $E \subseteq X$ is disconnected, can we assume that

$$\exists A, B \in \tau, E \cap A \cap E \cap B \cap E \subseteq A \cup B \cap A \cap B. \quad (8.58)$$

that is, that there exist two disjoint open sets, each of which intersects E , and that E is covered by their union?

Solution 1. [OJM]

See also [ORR].