

Minimal super task [on hold]

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The limit of the sequence (s_n) with $s_n = \{n\}$ is the empty set. This means, among others, that there is no natural number $n \in \mathbb{N}$, that remains in all terms of the sequence.

The ordered character of the natural numbers allows us to understand this sequence as a super task of transferring the complete set \mathbb{N} from a reservoir A to a reservoir Z . Every single transfer of a natural number during the super task can be represented by a term of the sequence and vice versa.

However, if we introduce an intermediate reservoir M and define that every transfer has to pass through M further, that a number n may leave M only after the number $n + 1$ has been inserted into M , then the sequence will have the same limit, i.e., the whole set \mathbb{N} will finally be in Z although this can be excluded by the definition of the super task.

How can this contradiction be solved?

set-theory

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