

Definition

A *least fixed point* of $f : \mathbf{P} \rightarrow \mathbf{P}$ is the minimum (if it exists) of the set of fixed points of f :

$$\text{lfp}(f) \quad := \quad \min_{\leq} \{x \in \mathbf{P} : f(x) = x\}.$$

So if multiple minima exist, we say there is no least fixed point? If yes, perhaps say this explicitly, for clarity?

The equality in ?? can be relaxed to “ \leq ”.