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

$$\mathrm{lfp}(f) \;:=\; \min_{\preceq} \{x \in \mathbf{P} : \; f(x) = x\}.$$

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 "$\preceq$".