Let $S$ be an arbitrary subspace of a topological space $X$. A theorem of S. Mrówka [Nieuw Arch. Wisk. (3) 16 (1968), 94–111; MR0244938] states that a bounded continuous function $f: S \to \mathbb{R}$ has a continuous extension to the whole of $X$ if and only if the sets $[f \leq r]$ and $[f \geq s]$ are completely separated in $X$ for all $r < s$ in $\mathbb{R}$. This theorem has been extended to pointfree topology in [J. Gutiérrez García and T. Kubiak, J. Pure Appl. Algebra 215 (2011), no. 6, 1198–1204; MR2769226] under the assumption that $S$ is a complemented sublocale of a locale $L$. In the paper under review the authors get rid of the assumption that the sublocale $S$ is complemented. This is the final localic version of Mrówka’s theorem. Further results of the paper under review include various characterizations of $C$-embedding, $C^*$-embedding and $z$-embedding of arbitrary sublocales. Normal locales are characterized in these terms. – Tomasz Kubiak

References


Note: This list reflects references listed in the original paper as accurately as possible with no attempt to correct errors.