

Semiprincipal closed ideals of βS

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Let S be an infinite discrete semigroup and let βS be the Stone-Čech compactification of S . For every $p \in \beta S$, $\text{cl}((\beta S)p(\beta S))$ is a closed two sided ideal of βS called the *semiprincipal closed ideal* generated by p . We show that if S can be embedded into a group, then βS contains $2^{2^{|S|}}$ pairwise incomparable semiprincipal closed ideals.