# Hereditary (bi)coreflective subcategories in certain categories of semitopological groups

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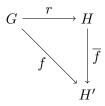
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- every subcategory of **STopGr** is isomorphism-closed

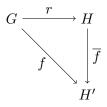
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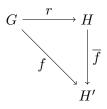


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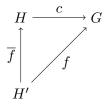
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  - abelian semitopological groups (**STopAb**)
  - torsion-free semitopological groups
  - Hausdorff semitopological groups

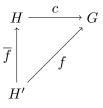
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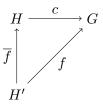


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- monocoreflective: every coreflection is a monomorphism
- bicoreflective: every coreflection is a bimorphism (monomorphism and epimorphism)

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   e.g. QTopGr in STopGr, TopGr in PTopGr

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- What are maximal hereditary coreflective subcategories of **A** that are not bicoreflective in **A**?
- What is the group  $r(\mathbb{Z})$ ?

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- $\bullet~Z$  with the topology generated by all non-trivial subgroups

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 ${\bf B}$  is the largest hereditary coreflective subcategory of  ${\bf A}$  that is not bicoreflective in  ${\bf A}$ 

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the closure of  $\{0\}$  in  $r(\mathbb{Z})$  is  $\langle n \rangle$ 

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Thank you for your attention.