Weak network and a weaker covering property for the basis problem

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We introduce weak network and apply it to the basis problem for first countable regular spaces. For example, we prove that continuous image of any subset of the Sorgenfrey line contains a subset that is either metrizable or Sorgenfrey. We also find a weaker covering property (than weak separation for all finite powers) that guarantees an uncountable metrizable or Sorgenfrey subspace.

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