Connectedness and generalised inverse limits

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It has recently been shown that a generalised inverse limit over intervals (an inverse limit with upper semicontinuous set-valued functions), is connected if and only if the system does not admit a CC-sequence. We define a related notion, a component base, and show that a GIL is connected if and only if the system does not admit a component base. We demonstrate how this new tool can be applied, and we present a number of new results on connectedness. In particular, results relating to the size and number of components.

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