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## inhabited set

Canonical name InhabitedSet

Date of creation 2013-03-22 14:25:24 Last modified on 2013-03-22 14:25:24 Owner mathwizard (128) Last modified by mathwizard (128)

Numerical id 6

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Entry type Definition Classification msc 03F55 A set A is called *inhabited*, if there exists an element  $a \in A$ . Note that in classical mathematics this is equivalent to  $A \neq \emptyset$  (i.e. A being nonempty), yet in intuitionistic mathematics we actually have to find an element  $a \in A$ . For example the set, which contains 1 if Goldbach's conjecture is true and 0 if it is false is certainly nonempty, yet by today's state of knowledge we cannot say if A is inhabited, since we do not know an element of A.