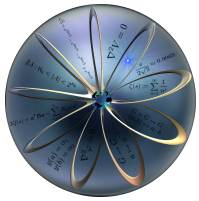

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Frobenius group

Canonical name	FrobeniusGroup
Date of creation	2013-03-22 13:16:30
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Entry type	Definition
Classification	msc 20B99
Defines	Frobenius complement

A permutation group G on a set X is *Frobenius* if no non-trivial element of G fixes more than one element of X. Generally, one also makes the restriction that at least one non-trivial element fix a point. In this case the Frobenius group is called *non-regular*.

The stabilizer of any point in X is called a *Frobenius complement*, and has the remarkable property that it is distinct from any conjugate by an element not in the subgroup. Conversely, if any finite group G has such a subgroup, then the action on cosets of that subgroup makes G into a Frobenius group.