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fibre map

Canonical name FibreMap

Date of creation 2013-03-22 14:32:27 Last modified on 2013-03-22 14:32:27 Owner whm22 (2009)

Last modified by whm22 (2009)

Numerical id 11

Author whm22 (2009)
Entry type Definition
Classification msc 55R10
Synonym fiber map
Related topic FibreBundle

Related topic LocallyTrivialBundle

Related topic LongExactSequenceLocallyTrivialBundle

Related topic Fibration2

Related topic HomotopyLiftingProperty

Defines fibre map

A fibre map is a map of topological spaces $f: E \to B$, for which there exists a space F, such that any point of B is contained in some neighbourhood U satisfying the following: on $f^{-1}U$, f restricts to the natural projection $F \times U \to U$, via some homeomorphic identification of $f^{-1}U$ with $F \times U$.

One class of examples are covering maps. Another example is the map $SO_3 \to S^2$ sending a rotation to the point it sends the "North Pole" to.