Info

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Objects stemming from $\mathbb{R}$-spaces of dimension 3

simply connected smooth $\mathbb{R}$-manifolds of dimension 3

(Poincare conjecture in dimension 3) Let M be a closed simply connected 3-manifold. Then M is diffeomorphic to S^3.

	non-contractible	**contractible**
closed	S^3	none.
open	$\mathbb{R} \times S^2$, and more?	$\mathbb{R}^3$ and uncountably many more

Thurston geometries manifolds

geometry $X \cong {}^{G}/_{K}$	**manifolds** $\Gamma \backslash^{X}$	**which** $\pi_1 \cong \Gamma$**?**
S^3		finite
$\mathbb{R}^3$		
$\mathbb{R}\boldsymbol{H}^3$	Kleinian groups $\Gamma <_{\mathrm{d}} PSL(2)(\mathbb{C})$ $\leftrightarrow$ Hyperbolic 3-manifolds/orbifolds $\Gamma \backslash^{\mathbb{R}\boldsymbol{H}^3}$	
$\mathbb{R} \times S^2$		
$\mathbb{R}\boldsymbol{H}^2 \times \mathbb{R}$		
$H(3, \mathbb{R})$		
$\widetilde{SL(2)}(\mathbb{R})$		
Sol		

Current note has 0 direct children and 0 total descendants.

- stem
  - Objects stemming from $\mathbb{R}$-spaces of dimension 3

And it has 13 siblings.

- stem
  - $GL(n)$
  - $GL(n)(\mathbb{C})$
  - $GL(n)(\mathbb{R})$
  - Knots
  - Objects stemming from spaces over $\mathbb{Q}$
  - Objects stemming from $\mathbb{R}$-spaces of dimension 2
  - Objects stemming from $\mathbb{R}$-spaces of dimension 3
  - Objects stemming from $\mathbb{R}$-spaces of dimension 4
  - subobjects of and functions on $\mathbb{R}^n, S^n, \mathbb{C}^n$ and its quotients $\Gamma \backslash^{\mathbb{R}^n}, \Gamma \backslash^{\mathbb{C}^n}$
  - Convex sets in $\mathbb{R}^n, \mathbb{R}\boldsymbol{H}^n$ or S^n
  - Objects stemming from $\mathbb{R}$-semi-simple/reductive Lie groups
  - Objects stemming from $PSL(2)(\mathbb{C})$
  - Objects stemming from $PSL(2)(\mathbb{R})$