

Info

This note, that [was found here](#), as a part of [a collection](#) is written (completely with human hands) by [Rupadarshi Ray](#), was created on March 1, 2026 12:39:29 PM, was last modified on August 30, 2026 4:10:14 PM, and was exported on September 7, 2026 3:04:08 PM.

H_2^3

#wiki/Man/R/3

The 3 dimensional handlebody of genus 2, H_2^3 is a compact 3-manifold with a connected boundary diffeomorphic to T_2^2 obtained by attaching two 1-handles to the 3-ball.



It deformation retracts to $S^1 \wedge S^1$. The fundamental group is isomorphic to F_2 .

hyperbolic metrics

Current note has 0 direct children and 0 total descendants.

- stretchy.
 - H_2^3

And it has 62 siblings.

- stretchy.
 - Trefoil 3_1 knot
 - The only compact connected Lie group that can act faithfully on a torus is itself
 - Hecke algebras
 - $\overline{B^n}$
 - $\text{BS}(1,2)$
 - $(\mathbb{C}, +, \times)$
 - $D^* := D \setminus \{0\}$
 - Cantor set
 - Configuration space of N rigid points in $\mathbb{R}^3$
 - Free groups
 - $GL(2)(\mathbb{Z}) \curvearrowright T^2$
 - H_2^3
 - $[a,b]$
 - Figure 8 knot
 - Lamplighter group on $\mathbb{Z}_2$
 - $\beta\mathbb{N}$
 - $\#_2\mathbb{R}P^2$
 - $\prod_{i\in\mathbb{N}}\{1,\dots,n_i\}$
 - $\mathbb{R}P^n$
 - $(\mathbb{Q}, +, \times, <)$
 - $\mathbb{Q}_{\hat{p}}$
 - $\overline{\mathbb{Q}}$
 - $\mathbb{Q}_{\text{constr}}$
 - $\mathbb{Q}(\xi_n)$
 - $\mathcal{O}_{\overline{\mathbb{Q}}}$
 - $(\mathbb{R}, +, \times, <, \sup)$
 - Homeomorphism of $\mathbb{R}^2$ that sends $\mathbb{N}$ to a countable closed discrete subset
 - $\mathbb{R}^2 \times S^1$
 - $\mathbb{R}^n$
 - $\mathbb{R} \times S^1$
 - $\mathbb{R} \times S^2$
 - S^1
 - $S^1 \wedge S^1$
 - $S^1 \times S^n$
 - S^2 and $\mathbb{C}P^1$
 - Mapping torus of the antipodal map of S^2
 - S^3
 - S^n
 - I -bundle
 - Symmetric group
 - $\mathbb{I}$
 - T^2
 - T_g^2
 - $T_{0,0,3}^2$
 - $\mathbb{R}^2 \setminus \{0\}$

- Three $T^2_{1,0,1}$ -glued at their boundaries
- $T^2_{1,1,0}$
- T^2_2
- $T^2_g \times [0,1]$
- $\#_{\mathbb{N}} T^2$
- Thompson's group
- T^n
- 3-valent tree
- 4-valent tree
- $[0,1]^{\mathbb{N}}$ with product topology.
- Whitehead manifolds
- $\mathbb{Z}$
- $\mathbb{Z}[\sqrt{m}]$
- $\mathbb{Z}[X]$
- $\mathbb{Z}^{\mathbb{N}}$
- $\mathbb{Z}[i]$
- $\mathbb{Z}[i\sqrt{5}]$