entailment_gold_inputs_agrees

- Premise: This yields a quadratic algorithm deciding the equality of diagrams in a free double category.
- Hypothesis: There exists a quadratic algorithm for deciding diagram equality in a free double category.
- Label: entailment
- Machine Label: entailment

- Premise: The right adjoint of this Quillen equivalence is the classical Segal's Nerve functor.
- Hypothesis: The Quillen equivalence has a right adjoint that is Segal's Nerve functor.
- Label: entailment
- Machine Label: entailment

- Premise: Along the way we prove numerous results showing that the enchilada category is rather strange.
- Hypothesis: The enchilada category has some unusual properties.
- Label: entailment
- Machine Label: entailment

- Premise: Let PreOrd(C) be the category of internal preorders in an exact category C.
- Hypothesis: PreOrd(C) is a category.
- Label: entailment

- Machine Label: entailment

- Premise: Persistence has proved to be a valuable tool to analyze real world data robustly.
- Hypothesis: Persistence is a valuable tool for robust analysis of real world data.
- Label: entailment
- Machine Label: entailment

- Premise: This note shows every Grothendieck topos has such a site.
- Hypothesis: Every Grothendieck topos has a site.
- Label: entailment
- Machine Label: entailment

- Premise: On the other hand subcanonical one-way sites are very special.
- Hypothesis: Subcanonical one-way sites are not common.
- Label: entailment
- Machine Label: entailment

- Premise: A site criterion for petit toposes will probably require subcanonical sites.
- Hypothesis: Subcanonical sites are required for site criterion in petit toposes.
- Label: entailment
- Machine Label: entailment

- Premise: We show that associative coequalizing multiplications suffice and call the resulting structures interpolads.
- Hypothesis: Interpolads can be constructed using associative coequalizing multiplications.
- Label: entailment
- Machine Label: entailment

- Premise: Often used implicitly, the precise statement of this property and its proof appears here.
- Hypothesis: This property has a precise statement and proof.
- Label: entailment
- Machine Label: entailment

- Premise: However, we provide examples to show that the reflector and coreflector need not coincide.
- Hypothesis: The reflector and coreflector can differ in some examples.
- Label: entailment
- Machine Label: entailment

- Premise: Results on the finiteness of induced crossed modules are proved both algebraically and topologically.
- Hypothesis: The finiteness of induced crossed modules can be proven algebraically and topologically.
- Label: entailment
- Machine Label: entailment

- Premise: In this paper we study the lattice of quantic conuclei for orthomudular lattices.
- Hypothesis: The lattice of quantic conuclei is relevant for studying orthomodular lattices.
- Label: entailment
- Machine Label: entailment

- Premise: We discuss two versions of a conjecture attributed to M. Barr.
- Hypothesis: There are multiple variations of the conjecture proposed by M. Barr.
- Label: entailment
- Machine Label: entailment

- Premise: We introduce MD-sketches, which are a particular kind of Finite Sum sketches.
- Hypothesis: MD-sketches are a subset of Finite Sum sketches.
- Label: entailment
- Machine Label: entailment

- Premise: As a corollary, we obtain that equivalence of data-specifications is decidable.
- Hypothesis: Decidability of data-specifications equivalence.
- Label: entailment
- Machine Label: entailment

- Premise: Their universal properties can then be derived with standard techniques as used in duality theory.

- Hypothesis: The universal properties of the objects can be derived using duality theory techniques.
- Label: entailment
- Machine Label: entailment

- Premise: These provide a new construction of the simplicial 2-category, Delta.
- Hypothesis: There exists a construction of the simplicial 2-category Delta.
- Label: entailment
- Machine Label: entailment

- Premise: Here we show an analogous description of locally finitely multipresentable categories.
- Hypothesis: Locally finitely multipresentable categories have a similar description.
- Label: entailment
- Machine Label: entailment

- Premise: In addition, we define and study the appropriate categorical structure underlying the MIX rule.
- Hypothesis: There exists a categorical structure for the MIX rule.
- Label: entailment
- Machine Label: entailment

- Premise: The concept of algebra is given as an adjunction with invertible counit.

- Hypothesis: Algebra can be defined as an adjunction with invertible counit.
- Label: entailment
- Machine Label: entailment

- Premise: We show that these doctrines are instances of more general pseudomonads.
- Hypothesis: The doctrines are specific cases of pseudomonads.
- Label: entailment
- Machine Label: entailment

- Premise: 2-crossed complexes are introduced and similar freeness results for these are discussed.
- Hypothesis: Freeness results are applicable to 2-crossed complexes.
- Label: entailment
- Machine Label: entailment

- Premise: The theory of enriched accessible categories over a suitable base category V is developed.
- Hypothesis: The theory of enriched accessible categories can be developed over a suitable base category V.
- Label: entailment
- Machine Label: entailment

- Premise: A particular attention is devoted to enriched locally presentable categories and enriched functors.

- Hypothesis: Enriched locally presentable categories and enriched functors are being studied in detail.
- Label: entailment
- Machine Label: entailment

- Premise: Consequently, an equivariant simplicial version of the Whitehead Theorem is derived.
- Hypothesis: A simplicial version of the Whitehead Theorem applies to equivariant settings.
- Label: entailment
- Machine Label: entailment

- Premise: Some examples are parity c omplexes, pasting schemes and directed complexes.
- Hypothesis: There exist examples of parity complexes, pasting schemes and directed complexes.
- Label: entailment
- Machine Label: entailment

- Premise: This role makes the relationship between projective objects and the tensor product especially critical.
- Hypothesis: The relationship between projective objects and the tensor product is crucial.
- Label: entailment
- Machine Label: entailment

- Premise: Conditions are given under which such a structure interacts appropriately with projective objects.

- Hypothesis: The given structure interacts appropriately with projective objects under certain conditions.
- Label: entailment
- Machine Label: entailment

- Premise: We give an abstract characterization of categories which are localizations of Maltsev varieties.
- Hypothesis: Categories which are localizations of Maltsev varieties can be abstractly characterized.
- Label: entailment
- Machine Label: entailment

- Premise: These results can be applied to characterize localizations of naturally Maltsev varieties.
- Hypothesis: The results can be used to characterize localizations of naturally Maltsev varieties.
- Label: entailment
- Machine Label: entailment

- Premise: Using the Chu-construction, we define a group algebra for topological Hausdorff groups.
- Hypothesis: A group algebra can be defined for topological Hausdorff groups using the Chu-construction.
- Label: entailment
- Machine Label: entailment

- Premise: We define what is a pseudomonad with compatible structure with respect to two given pseudomonads.

- Hypothesis: There exist two given pseudomonads.
- Label: entailment
- Machine Label: entailment

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neutral_gold_inputs_agrees

- Premise: Let PreOrd(C) be the category of internal preorders in an exact category C.
- Hypothesis: PreOrd(C) has a unique maximal element.
- Label: neutral
- Machine Label: neutral

- Premise: Results on the finiteness of induced crossed modules are proved both algebraically and topologically.
- Hypothesis: The algebraic and topological methods yield equivalent results on the finiteness of induced crossed modules.
- Label: neutral
- Machine Label: neutral

- Premise: A construction for the free monoidal category on a promonoidal category is provided.
- Hypothesis: Promonoidal categories have unique constructions for free monoidal categories.
- Label: neutral
- Machine Label: neutral

- Premise: We discuss two versions of a conjecture attributed to M. Barr.
- Hypothesis: The conjecture attributed to M. Barr is true.
- Label: neutral
- Machine Label: neutral

- Premise: We introduce MD-sketches, which are a particular kind of Finite Sum sketches.
- Hypothesis: MD-sketches are more expressive than Finite Sum sketches.
- Label: neutral
- Machine Label: neutral

- Premise: These provide a new construction of the simplicial 2-category, Delta.
- Hypothesis: The new construction of Delta is different from existing ones.
- Label: neutral
- Machine Label: neutral

- Premise: The concept of algebra is given as an adjunction with invertible counit.
- Hypothesis: All algebra concepts have an invertible counit.
- Label: neutral
- Machine Label: neutral

- Premise: The theory of enriched accessible categories over a suitable base category V is developed.

- Hypothesis: Enriched accessible categories are useful in category theory.
- Label: neutral
- Machine Label: neutral

- Premise: A particular attention is devoted to enriched locally presentable categories and enriched functors.
- Hypothesis: Enriched locally presentable categories and enriched functors have unique properties.
- Label: neutral
- Machine Label: neutral

- Premise: Some examples are parity c omplexes, pasting schemes and directed complexes.
- Hypothesis: These examples have similar mathematical properties.
- Label: neutral
- Machine Label: neutral

- Premise: We give an abstract characterization of categories which are localizations of Maltsev varieties.
- Hypothesis: All Maltsev varieties can be localized into certain categories.
- Label: neutral
- Machine Label: neutral

- Premise: Using the Chu-construction, we define a group algebra for topological Hausdorff groups.

- Hypothesis: The group algebra defined using Chu-construction is isomorphic to traditional group algebras.
- Label: neutral
- Machine Label: neutral

- Premise: We present some new findings concerning branched covers in topos theory.
- Hypothesis: Branched covers can have diverse applications in topos theory.
- Label: neutral
- Machine Label: neutral

- Premise: Finally, we characterize when certain categories of sheaves are toposes.
- Hypothesis: Certain categories of sheaves are not toposes.
- Label: neutral
- Machine Label: neutral

- Premise: First a cartesian closed extension L of CLS is obtained.
- Hypothesis: L is a suitable extension for CLS.
- Label: neutral
- Machine Label: neutral

- Premise: An equational hull of VAR w.r.t. all operations is also discussed.
- Hypothesis: The equational hull of VAR is unique.
- Label: neutral
- Machine Label: neutral

- Premise: A feature of a ramification groupoid is that it carries a certain order structure.
- Hypothesis: All ramification groupoids carry an order structure.
- Label: neutral
- Machine Label: neutral

- Premise: This is simultaneously an extension of Verdier's version of Cech cohomology to homotopy.
- Hypothesis: This extension has practical applications in algebraic topology.
- Label: neutral
- Machine Label: neutral

- Premise: The primitive symbolic and categorical structures are extended to make their types sober.
- Hypothesis: The extended types are sober.
- Label: neutral
- Machine Label: neutral

- Premise: We restrict our study to the case of locally partially ordered bases.
- Hypothesis: Locally partially ordered bases have unique properties.
- Label: neutral
- Machine Label: neutral

- Premise: We give two applications: sheaves over locales and group actions.
- Hypothesis: The applications of sheaves over locales and group actions are related.
- Label: neutral
- Machine Label: neutral

- Premise: It is shown that every codescent morphism of groups is effective.
- Hypothesis: Codescent morphisms of groups are unique.
- Label: neutral
- Machine Label: neutral

- Premise: These modules and their modulations then give rise to a bicategory.
- Hypothesis: The bicategory is unique.
- Label: neutral
- Machine Label: neutral

- Premise: We give an explicit construction of the category Opetope of opetopes.
- Hypothesis: The category Opetope has a finite number of objects and morphisms.
- Label: neutral
- Machine Label: neutral

- Premise: This result encompasses many known and new examples of quasitopoi.

- Hypothesis: There exist examples of quasitopoi not covered by this result.
- Label: neutral
- Machine Label: neutral

- Premise: Another is to make clear which parts of the proofs of such results are formal.
- Hypothesis: The proofs of some results regarding category theory are not fully formal.
- Label: neutral
- Machine Label: neutral

- Premise: The poly notions of functors, modules and their transformations are introduced as well.
- Hypothesis: The introduction of poly notions enhances the study of functors, modules and transformations.
- Label: neutral
- Machine Label: neutral

- Premise: The required simplicial approximation results for simplicial sets and their proofs are given in full.
- Hypothesis: The required simplicial approximation results are correct.
- Label: neutral
- Machine Label: neutral

- Premise: Moreover, as the authors soon suspected, it specializes a much more general result.

- Hypothesis: The general result is also proven.
- Label: neutral
- Machine Label: neutral

- Premise: We study its implications on the purity of monomorphisms and the flatness of algebras.
- Hypothesis: Monomorphisms are pure and algebras are flat.
- Label: neutral
- Machine Label: neutral

- Premise: We describe a completion of gms's by Cauchy filters of formal balls.
- Hypothesis: The completion of gms's by Cauchy filters is unique.
- Label: neutral
- Machine Label: neutral

- Premise: We give two related universal properties of the span construction.
- Hypothesis: The span construction has practical applications.
- Label: neutral
- Machine Label: neutral

- Premise: This work is a contribution to a recent field, Directed Algebraic Topology.
- Hypothesis: Directed Algebraic Topology is a rapidly growing field.
- Label: neutral
- Machine Label: neutral

contradiction_gold_inputs_agrees

- Premise: Let PreOrd(C) be the category of internal preorders in an exact category C.
- Hypothesis: Preord(C) is a subcategory of the category of all preorders.
- Label: contradiction
- Machine Label: contradiction

- Premise: Persistence has proved to be a valuable tool to analyze real world data robustly.
- Hypothesis: Persistence is not a valuable tool to analyze real world data robustly.
- Label: contradiction
- Machine Label: contradiction

- Premise: This note shows every Grothendieck topos has such a site.
- Hypothesis: Some Grothendieck toposes do not have such a site.
- Label: contradiction
- Machine Label: contradiction

- Premise: However, we provide examples to show that the reflector and coreflector need not coincide.
- Hypothesis: The reflector and coreflector always coincide.

- Label: contradiction
- Machine Label: contradiction

- Premise: A construction for the free monoidal category on a promonoidal category is provided.
- Hypothesis: There is no construction for the free monoidal category on a monoidal category.
- Label: contradiction
- Machine Label: contradiction

- Premise: Their universal properties can then be derived with standard techniques as used in duality theory.
- Hypothesis: Their universal properties cannot be derived with standard techniques as used in duality theory.
- Label: contradiction
- Machine Label: contradiction

- Premise: Here we show an analogous description of locally finitely multipresentable categories.
- Hypothesis: Locally finitely multipresentable categories have a unique description.
- Label: contradiction
- Machine Label: contradiction

- Premise: In addition, we define and study the appropriate categorical structure underlying the MIX rule.
- Hypothesis: The MIX rule is not applicable in categorical structures.

- Label: contradiction
- Machine Label: contradiction

- Premise: We show that these doctrines are instances of more general pseudomonads.
- Hypothesis: All doctrines are not instances of more general pseudomonads.
- Label: contradiction
- Machine Label: contradiction

- Premise: 2-crossed complexes are introduced and similar freeness results for these are discussed.
- Hypothesis: All freeness results for 2-crossed complexes have already been fully explored.
- Label: contradiction
- Machine Label: contradiction

- Premise: The theory of enriched accessible categories over a suitable base category V is developed.
- Hypothesis: Enriched accessible categories are not relevant in mathematics.
- Label: contradiction
- Machine Label: contradiction

- Premise: Consequently, an equivariant simplicial version of the Whitehead Theorem is derived.
- Hypothesis: The Whitehead Theorem is disproven in its simplicial version.

- Label: contradiction
- Machine Label: contradiction

- Premise: This role makes the relationship between projective objects and the tensor product especially critical.
- Hypothesis: Tensor product has no relationship with projective objects.
- Label: contradiction
- Machine Label: contradiction

- Premise: These examples were not fabricated to illustrate the abstract possibility of misbehavior.
- Hypothesis: These examples were fabricated to illustrate the abstract possibility of misbehavior.
- Label: contradiction
- Machine Label: contradiction

- Premise: We define what is a pseudomonad with compatible structure with respect to two given pseudomonads.
- Hypothesis: A pseudomonad can only have one compatible structure with respect to another pseudomonad.
- Label: contradiction
- Machine Label: contradiction

- Premise: This all extends routinely to local presentability with respect to any regular cardinal.
- Hypothesis: Local presentability does not extend to any regular cardinal.

- Label: contradiction
- Machine Label: contradiction

- Premise: The main tool in the new approach is the Chu construction.
- Hypothesis: The Chu construction is not a useful tool in the new approach.
- Label: contradiction
- Machine Label: contradiction

- Premise: The purpose of this paper is to indicate some bicategorical properties of ring theory.
- Hypothesis: Ring theory can be fully understood without considering bicategorical properties.
- Label: contradiction
- Machine Label: contradiction

- Premise: The appendix provides the definitions of a braided monoidal bicategory and sylleptic monoidal bicategory.
- Hypothesis: The appendix provides the definition of a braided monoidal category and sylleptic monoidal category.
- Label: contradiction
- Machine Label: contradiction

- Premise: In this paper we show that under slightly stronger assumptions the converse is also true.
- Hypothesis: The converse is not true.
- Label: contradiction

- Machine Label: contradiction

- Premise: Finally, we characterize when certain categories of sheaves are toposes.
- Hypothesis: All categories of sheaves are toposes.
- Label: contradiction
- Machine Label: contradiction

- Premise: First a cartesian closed extension L of CLS is obtained.
- Hypothesis: The extension L of CLS is not cartesian closed.
- Label: contradiction
- Machine Label: contradiction

- Premise: The 2-category VAR of finitary varieties is not varietal over CAT.
- Hypothesis: There exists a finitary variety that is varietal over CAT.
- Label: contradiction
- Machine Label: contradiction

- Premise: This is simultaneously an extension of Verdier's version of Cech cohomology to homotopy.
- Hypothesis: This is a version of Cech cohomology that excludes homotopy.
- Label: contradiction
- Machine Label: contradiction

- Premise: Exact sequences are a well known notion in homological algebra.
- Hypothesis: Exact sequences are not used frequently in homological algebra.
- Label: contradiction
- Machine Label: contradiction

- Premise: We then focus on several methods of building entropic categories.
- Hypothesis: Building non-entropic categories is impossible.
- Label: contradiction
- Machine Label: contradiction

- Premise: Several examples are discussed, based first on the notion of a bigroup.
- Hypothesis: Several examples are discussed, based first on the notion of a monogroup.
- Label: contradiction
- Machine Label: contradiction

- Premise: The symbolic and categorical structures are thereby shown to be equivalent.
- Hypothesis: The physical structures are equivalent to the symbolic structures.
- Label: contradiction
- Machine Label: contradiction

- Premise: Examples include attractive fixpoints, repulsive fixpoints, strange attractors and the logistic equation.
- Hypothesis: Examples do not include any chaotic systems.
- Label: contradiction
- Machine Label: contradiction

- Premise: The primitive symbolic and categorical structures are extended to make their types sober.
- Hypothesis: The extended types of primitive structures are not sober.
- Label: contradiction
- Machine Label: contradiction

- Premise: We restrict our study to the case of locally partially ordered bases.
- Hypothesis: We study the case of globally partially ordered bases.
- Label: contradiction
- Machine Label: contradiction

- Premise: The construction is based on the geometric notion of thin square.
- Hypothesis: The construction is based on the algebraic notion of thin square.
- Label: contradiction
- Machine Label: contradiction

- Premise: We generalize Dress and MÃ¼ller's main result in Decomposable functors and the exponential principle.
- Hypothesis: Dress and Müller's main result cannot be generalized.
- Label: contradiction
- Machine Label: contradiction
