Why

Closure under monotone limits is a weaker condition than that included in the definition of sigma algebras, but is sufficient if the set is also an algebra.[1]

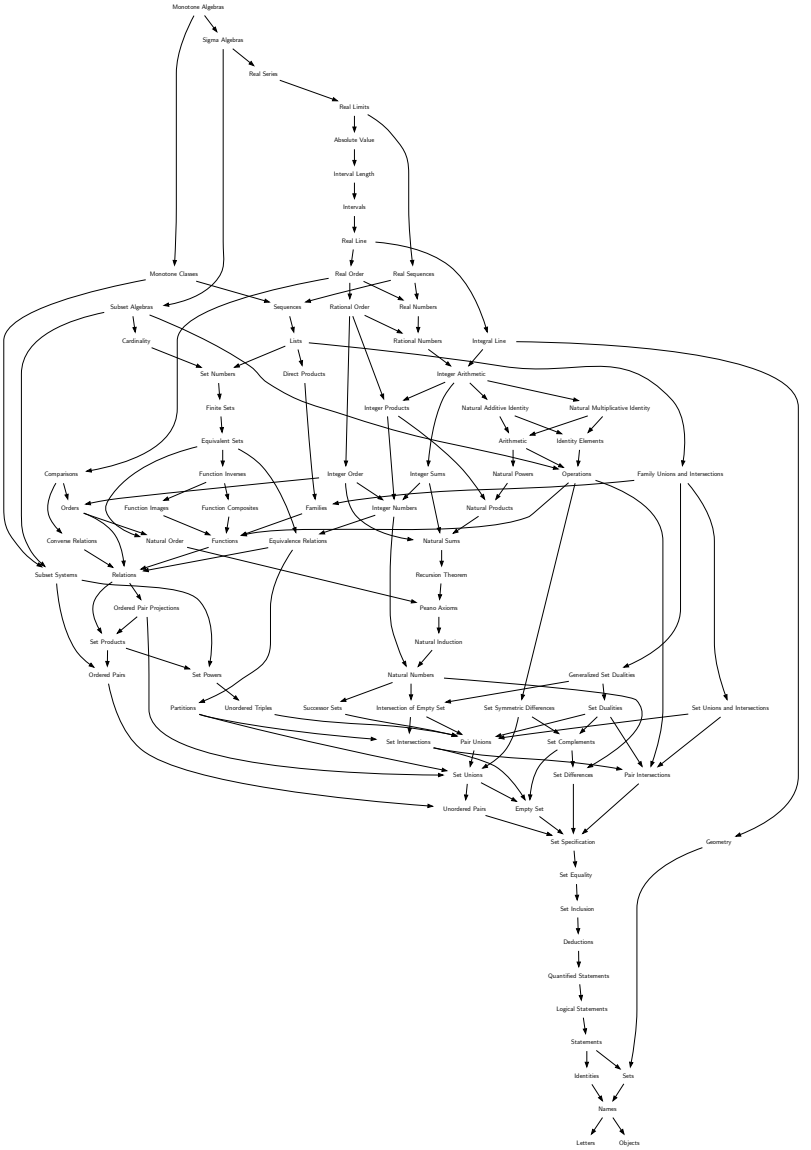
Result

If a subset algebra is a monotone space, then it is a countably summable subset algebra.

Proposition 1. *A subset algebra is a countably summable if either:*

1. *the limit of a nondecreasing sequence of distinguished sets is distinguished*
2. *the limit of a nonincreasing sequence of distinguished sets is distinguished.*

[1] Future editions will expand.


Monotone Algebras
Sigma Algebras
Real Series
Real Limits
Absolute Value
Interval Length
Intervals
Real Line
Monotone Classes
Real Order
Real Sequences
Subset Algebras
Sequences
Rational Order
Real Numbers
Cardinality
Lists
Rational Numbers
Integral Line
Set Numbers
Direct Products
Integer Arithmetic
Finite Sets
Integer Products
Natural Additive Identity
Natural Multiplicative Identity
Equivalent Sets
Arithmetic
Identity Elements
Comparisons
Function Inverses
Integer Order
Integer Sums
Natural Powers
Operations
Family Unions and Intersections
Orders
Function Images
Function Composites
Families
Integer Numbers
Natural Products
Converse Relations
Natural Order
Functions
Equivalence Relations
Natural Sums
Subset Systems
Relations
Recursion Theorem
Peano Axioms
Ordered Pair Projections
Natural Induction
Set Products
Ordered Pairs
Set Powers
Natural Numbers
Generalized Set Dualities
Partitions
Unordered Triples
Successor Sets
Intersection of Empty Set
Set Symmetric Differences
Set Dualities
Set Unions and Intersections
Set Intersections
Pair Unions
Set Complements
Set Unions
Set Differences
Pair Intersections
Unordered Pairs
Empty Set
Set Specification
Geometry
Set Equality
Set Inclusion
Deductions
Quantified Statements
Logical Statements
Statements
Identities
Sets
Names
Letters
Objects