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]

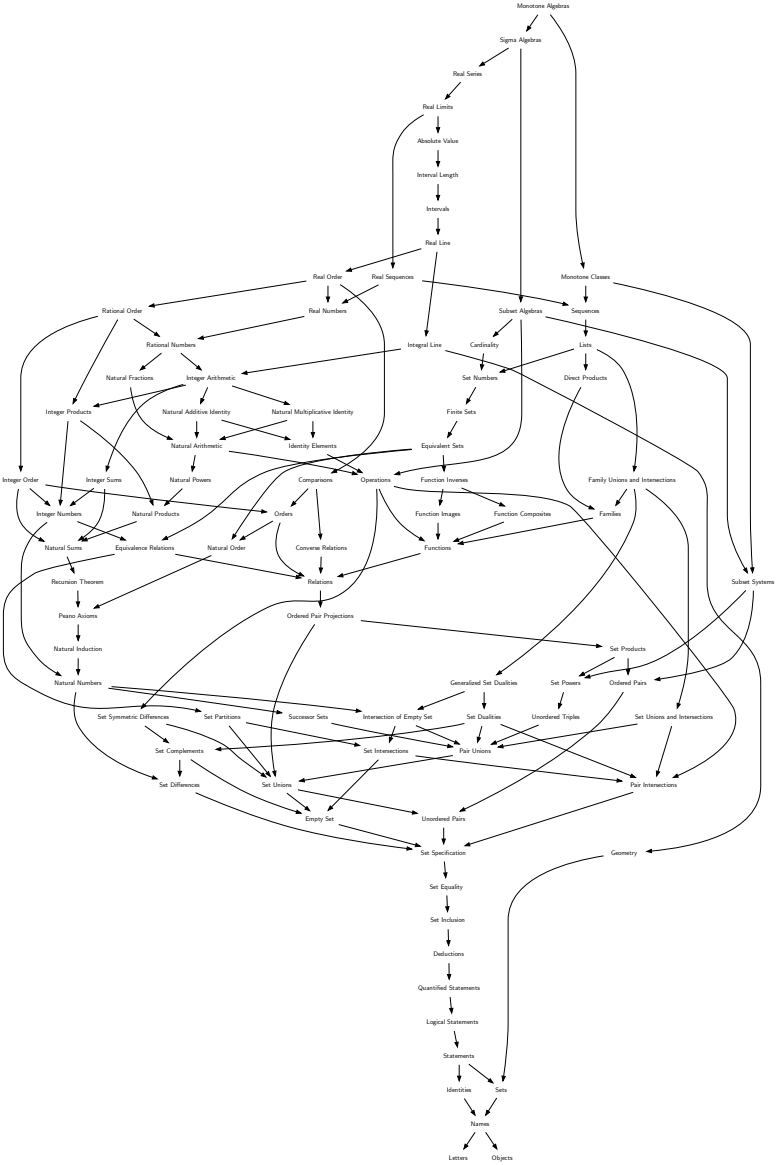
Result

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