mostly stub

TODO: whether to make this about random variables or about data?

**Why**

**Definition**

Let $f : \mathbf{R}^d \to \mathbf{R}$ be a density. The *correlation matrix* of $f$ is the matrix whose $i, j$th entry is the correlation between components $i$ and $j$ of $f$.

Correlation Matrix

Correlation

Matrices

Standard Deviation

Covariance

Variance

Expectation

Random Variables

Measurable Functions

Probability Measures

Measures

Extended Real Numbers

Topological Sigma Algebra

Event Probabilities

Real Limits

Topological Spaces

Vectors

Probability Distributions

Real Square Roots

Metrics

Intervals

Real Sequences

N-Dimensional Space

Real Summation

Probability Events

Distance

Real Numbers

Fields

Sequences

Space

Natural Summation

Subset Algebras

Probability Outcomes

Natural Square Roots

Length Common Notions

Rational Numbers

Groups

Direct Products

Cardinality

Family Operations

Set Operations

Probability

Square Numbers

Integer Numbers

Natural Order

Natural Sums

Natural Families

Algebras

Common Sense

Squares

Zero

Natural Products

Function Composites

Injective Functions

Operations

Families

Subset Systems

Equation Solutions

Natural Numbers

Functions

Set Symmetric Differences

Power Set

Equations

Set Intersections

Relations

Set Unions

Ordered Pairs

Set Complements

Unordered Pairs

Empty Set

Set Specification

Set Inclusion

Set Equality

Sentences

Identity

Sets

Standardized Accounts

Accounts

Objects

Letters