Storage and Data Management for Quantum Computing

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Multiverse of Data and Storage

• Ordinary Framework
  • Space
  • Time
  • Non-Euclidean Manifolds
  • Non-Analytic Curvature
  • Systems of Open Geodesics
  • Kernels
  • Murphy's Law
Multiverse of Data and Storage

- High Speeds Involved
  - Space-time
  - Generalized Lorentzian
  - Hyperbolicity
  - Null Geodesics
  - Incomplete Geodesics
  - Closed Time-like curves
Storage Structure

- Smooth/Non-Smooth Surface
- Regression of Interlocking
- Continuation
  - Contraction/Extension
  - Singularity
  - Poles
- Chaos
  - Fixed Points
  - Initial Conditions
  - Bifurcation
  - Prediction
Storage Structure

- Causal Structures
  - Time-like curves
  - Space-like curves
  - Light Cone
Storage Objects

• Smooth Objects
• Knots
• Fractal
• Branches
• Strips
• Paths
• Curves
• Segments
Storage Objects

- Images
- Fabrics
- Events/Event Horizons
- End Points
- Null Geodesics
- Boundaries
- Generators
- Regions
- Bottles
Storage Dimensionality

- Side
- Surface
  - Whole
  - Fractional
- Edge
- Capacity
  - Length
  - Area
  - Volume
- Minkowski Space
Operations

• Partition
• Write
• Erase
• Read
• Space-Filling
• Filing
• Scatter
• Overlap
• Shift
Operations

· Walk
· Loading
· Emission
· Propagation, Transmission
· Interference
· Diffraction
· Radiation
· Decoherence
· Cancel
Information

• Algebraic
  • Hard to Determine Equation
  • Possible to Parametrize
  • Hopf Algebras

• Geometric
  • Symmetric Groups
  • Hard to Virtualize
Computation

• Forward Recurrence
• Backward Recurrence
• Forward Series Recurrence
• Eigenvalues of Finite Tridiagonal Matrices