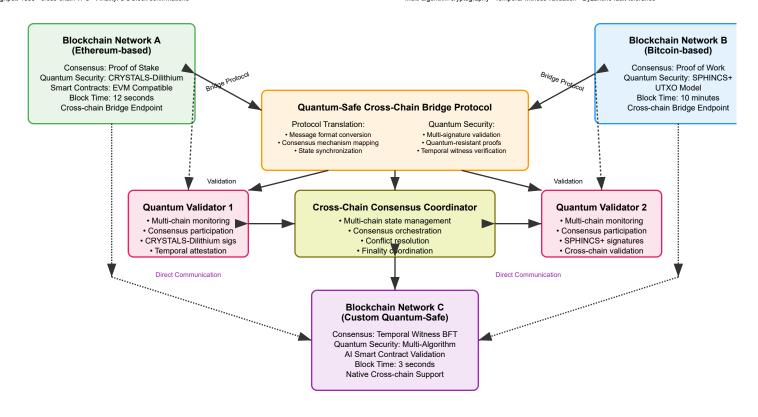
FIGURE 4: Cross-Chain Quantum Interoperability Architecture

ss-Chain Performance: aughput: 1000+ cross-chain TPS • Finality: 3-5 block confirmations

Quantum Security Features: • Multi-algorithm cryptography • Temporal witness validation • Byzantine fault tolerance



Cross-Chain Transaction Flow

- 1. Transaction Initiation · Source chain validation
- 2. Bridge Protocol
 - 3. Consensus Coordination Multi-chain validation
 Temporal witness verification
- 4. Target Chain Execution State update
 Finality confirmation
- 5. Completion Cross-chain finality
 State synchronization