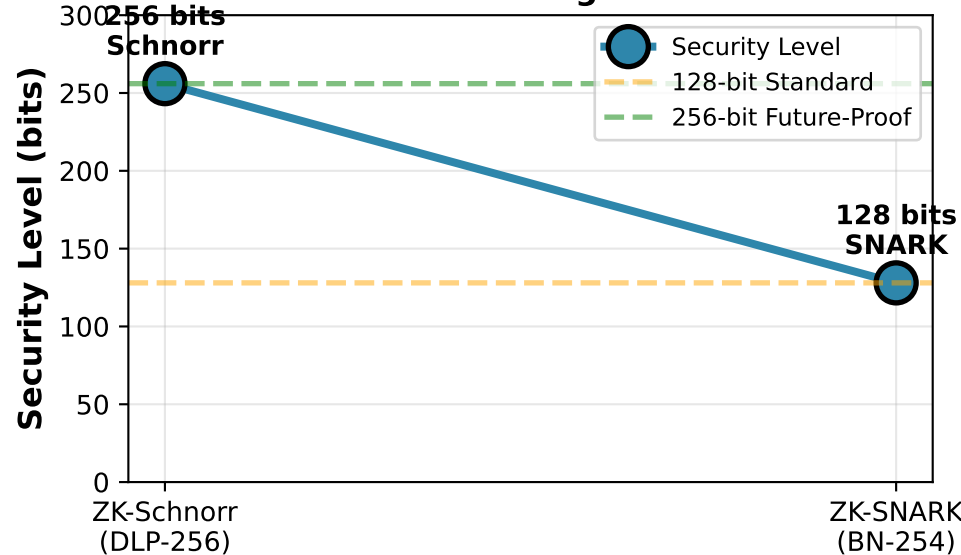


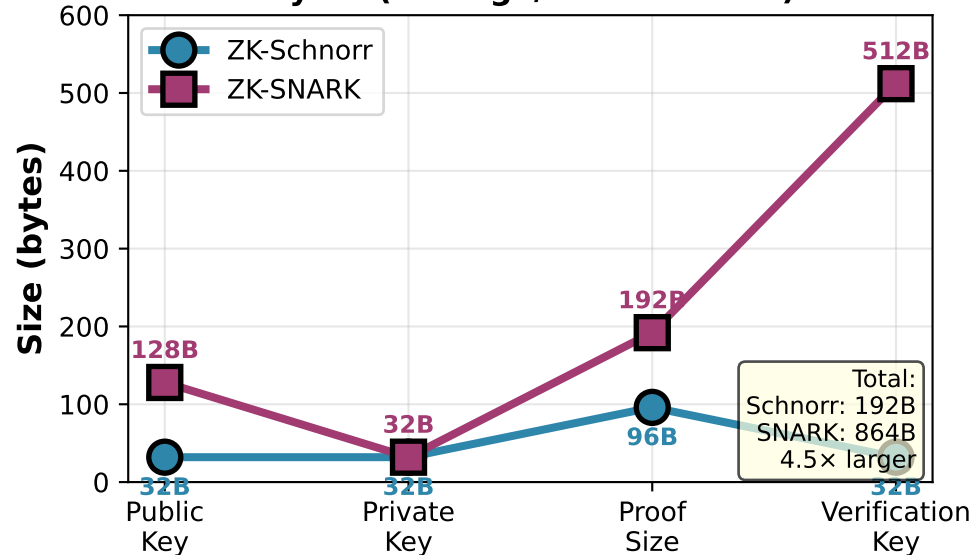
# DETAILED SECURITY METRICS COMPARISON

## ZK-SNARK vs ZK-Schnorr: Quantitative Analysis

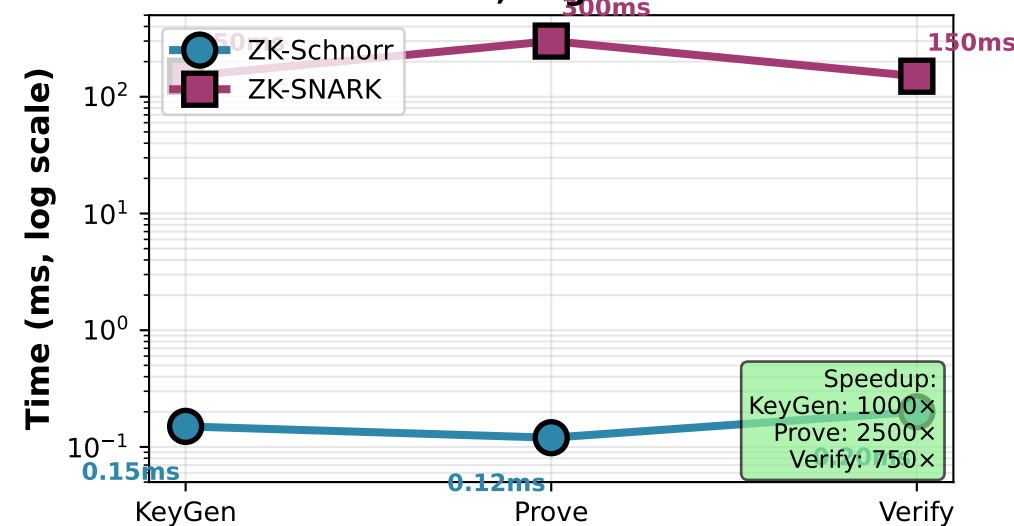
1. COMPUTATIONAL SECURITY  
Based on: Discrete Logarithm Problem



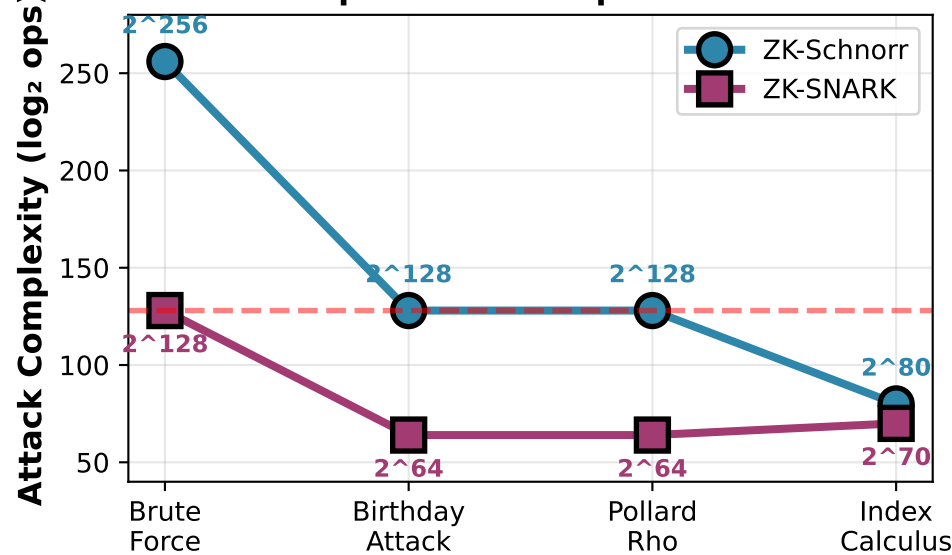
2. KEY & PROOF SIZES  
Bytes (Storage/Transmission)



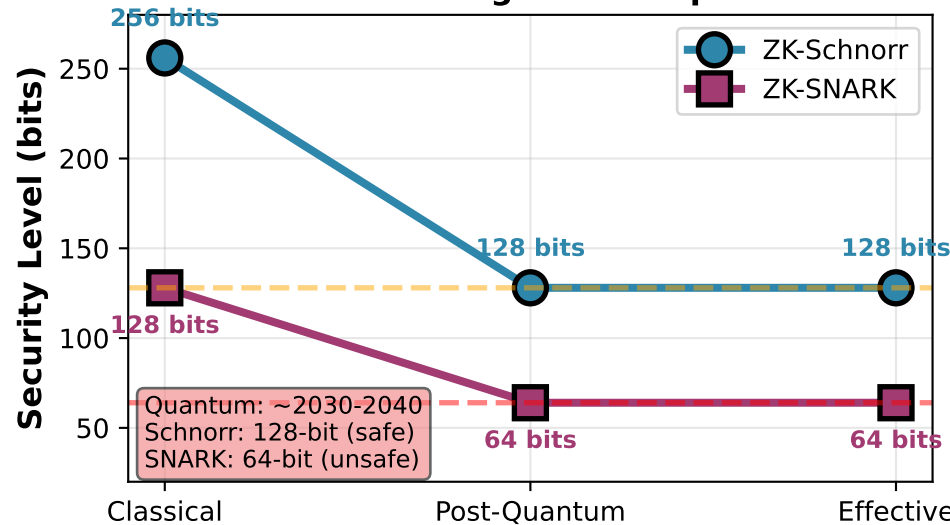
3. PERFORMANCE METRICS  
Intel i7, Avg 20 runs



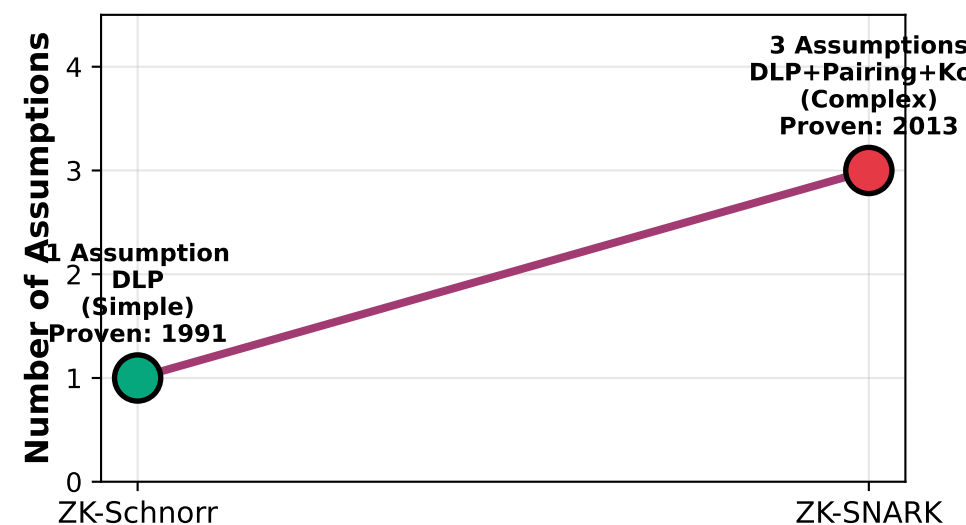
4. CRYPTANALYSIS RESISTANCE  
Computational Steps to Break



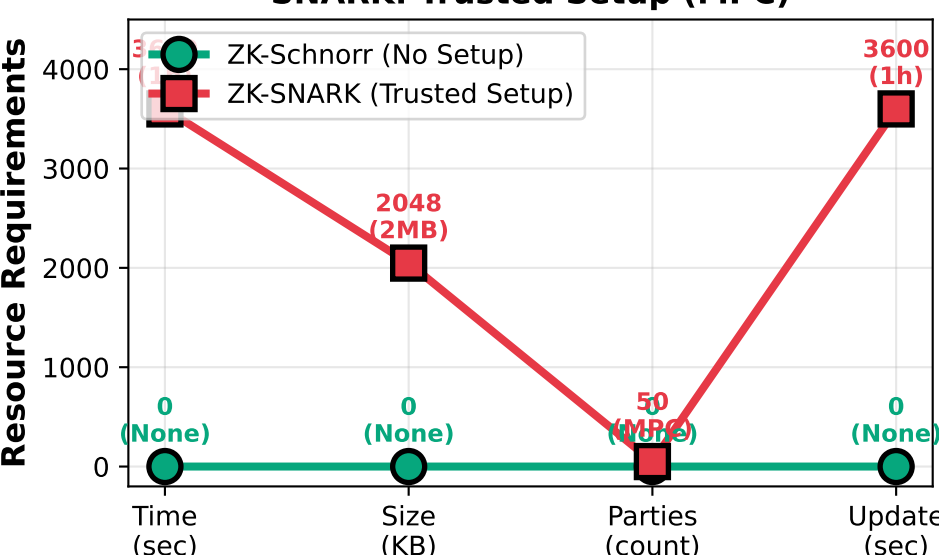
5. QUANTUM THREAT ANALYSIS  
Grover's Algorithm Impact



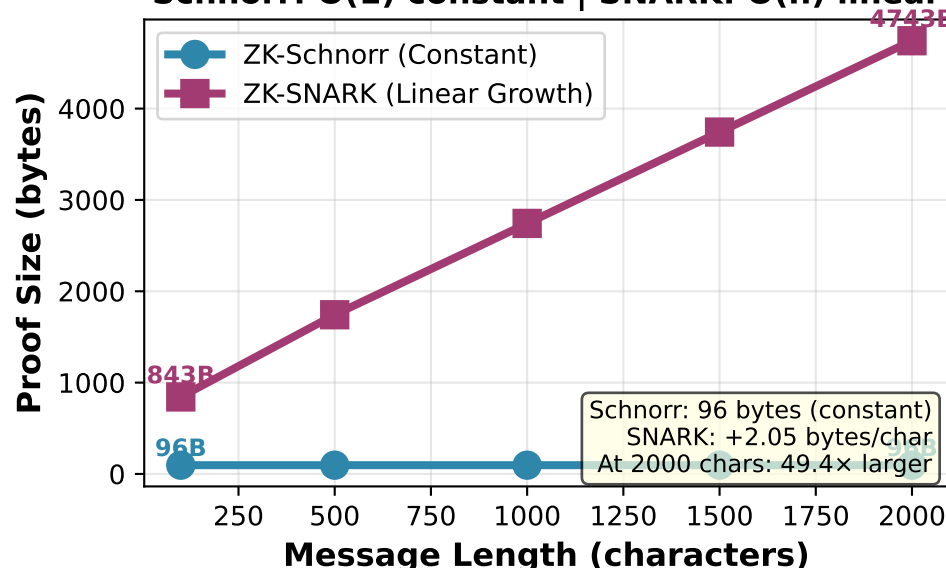
6. CRYPTOGRAPHIC FOUNDATION  
Fewer = More Trust



7. SETUP COMPLEXITY  
SNARK: Trusted Setup (MPC)



8. PROOF SIZE SCALABILITY  
Schnorr: O(1) constant | SNARK: O(n) linear



9. SECURITY vs PERFORMANCE  
Higher Right = More Secure | Higher Up = Faster

