Abstract

Cryptography is the science of transmission and reception of secret messages. Recently electronic communication has become an essential part of every aspect of human life. Message encryption has become very essential to avoid the threat against possible attacks by hackers during transmission process of the message. Finite state machines (FSM), also known as finite state automation (FSA), at their simplest, are models of the behaviors of a system or a complex object, with a limited number of defined conditions or modes, where mode transitions change with circumstance. In the present paper, new cryptographic scheme is proposed using finite state machine and Pauli spins $\frac{1}{2}$ matrices.

References


**Index Terms**

Computer Science  
Security

**Keywords**

Moore Machine  key  recurrence relation  cryptography  Pauli Spin 1/2 matrices  
Quantum Mechanics  
Entanglement