

Table of Contents

Volume 14 Number 2

June 2024

**$O(\log N)$ Algorithm for Amplitude Amplification and $O(\log N)$ Algorithms
for Amplitude Transfer in Grover's Algorithm**

Y. Liu 169

Simulation of Air Flow along Human Lung for Cylindrical Channel of Porous Medium

S. Akhter, M. U. Ahmmed 189

Theoretical Quantization of Exact Wave Turbulence in Exponential Oscillons and Pulsons

V.A. Miroshnikov 203

**Impact of a Bumpy Nonuniform Electric Field on Oscillations
of a Massive Point-Like Charged Particle**

H. Sarafian 240

Another SSOR Iteration Method

T. Smotzer, J. Buoni 248

Revealing the Hidden Mathematical Beauties of the Cayley-Hamilton Method

H. Sarafian 257

The Quantum Microverse: A Prime Number Framework for Understanding the Universe

J. R. Crary 264

**Global Stability Analysis of the Mathematical Model for Malaria Transmission
between Vector and Host Population**

R. Alsulami, A. Almatrafi, N. Almohammadi, H. Alosaimi, H. A. Batarfi 275