

Table of Contents

Preface	I
Program Committee and Referees	II
Quantum Algorithms for Wire Circuit Architecture	1
<i>Farid Ablayev, Alexander Vasiliev</i>	
Probabilistic and quantum finite automata with postselection	14
<i>Abuzer Yakaryılmaz, A. C. Cem Say</i>	
Quantum one-way one-counter automata	25
<i>A. C. Cem Say, Abuzer Yakaryılmaz, Şefika Yüzsever</i>	
A context-free language not recognizable by postselection finite quantum automata	35
<i>Oksana Scegulnaja-Dubrovskaja, Rūsiņš Freivalds</i>	
Searching for Boolean Functions with Small Quantum Query Algorithm Complexity	49
<i>Igors Stepanovs</i>	
Randomization vs. amount of nonconstructivity in learning of recursive functions	60
<i>Ilja Kucevalovs</i>	
Probabilistic Reduction	69
<i>Kaspars Balodis</i>	
To the comparison of capabilities of probabilistic and frequential algorithms	74
<i>Natalya Grishchenko, Ruben Agadzanyan</i>	
Quantum Query Algorithms for Relations	78
<i>Alina Vasilieva</i>	
Random Walk in Execution Graph	90
<i>Ruslans Tarasovs</i>	
Infinite Languages Recognized by Quantum Automata	97
<i>Ilze Dzelme-Bērziņa</i>	
Grover's Algorithm With Mistakes	107
<i>Artūrs Bačkurs</i>	