

Boris Khots, Dmitriy Khots Nikolai Khots

ELEMENTS OF OBSERVER'S MATHEMATICS

MONOGRAPHY

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Observer's Mathematics were developed by authors based on denial of infinity idea. In this book authors define the concept of observer, the set of elements where observer works, arithmetic operations depending on observer. There is shown the stochastic appearance in this arithmetic. There are reviewed several classic arithmetical problems from Observer's Mathematics point of view. Also authors consider elements of algebra, geometry and calculus from Observer's Mathematics point of view. In particular there are reviewed 10th Hilbert problem and three classic geometries — Euclidean, Gauss-Bolyai-Lobachevsky and Riemannian. Special role plays Observer's Mathematics black hole concept also considered in this book. And finally authors formulate and prove the Universal Divisibility Criterion working for both arithmetic — classic Mathematics and Observer's Mathematics.



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CONTENTS

INTRODUCTION		
1. EL	EMENTS OF ARITHMETIC IN OBSERVER'S MATHEMATICS	4
1.1.	Operations over numbers — elements $\in W_n$	5
1.2.	Complex numbers	16
1.3.	Last Fermat's, Fermat's and Mersenne's numbers, Waring's problems	18
	1.3.1. Analogy of Fermat's Last Problem	
	1.3.2. Analogy of Mersenne's and Fermat's Numbers Problems	
	1.3.3. Analogy of Waring's Problem	
1.4.	Lehmer's Number	
1.5.	Euler Brick and Perfect Cuboid problems	
1.6.	Square Peg Problem	
1.7.	Classic problem — trisection of angle	34
2. El	EMENTS OF ALGEBRA IN OBSERVER'S MATHEMATICS	40
2.1.	Space <i>E_mW_n</i>	40
2.2.	Scalar product in $E_m W_n$	
2.3.	Vector product in E_3W_p	
2.4.	Operations over matrices	55
2.5.	Linear equations	56
2.6.	Analogy of Hilbert's Tenth Problem	59
3. El	EMENTS OF GEOMETRY IN OBSERVER'S MATHEMATICS	63
	EMENTS OF MATHEMATICAL ANALYSIS — CALCULUS BSERVER'S MATHEMATICS	67
IN O	DSERVER 3 MAI HEMAIICS	67
4.1.	Derivative definitions	
4.2.	Examples of derivative calculations for linear function	
4.3.	Examples of derivative calculations for quadratic function	
4.4.	Integral definition	
4.5.	Derivative properties in Observer's Mathematics	
4.6.	Integral properties in Observer's Mathematics	96
110	∞∞	