Contents

Part I – Education in Mathematics

1. **K. Domańska, M. Wróbel** – *About the ways of defining connected sets in the topological spaces* ____ 11

2. **A. Olek** – *CLIL Method in Mathematics Teaching at University Level* ____ 17

Part II – Mathematics and Its Applications

1. **A. Górnicka, J. Grygiel, I. Tyrala** – *On the lattice of tolerances for a finite chain* ____ 25

2. **Z. Kostrzycka** *All splitting logics in the lattice $NEXT(KTB.3'A)$* ____ 31

3. **T. Kyryluch** – *Economic-Mathematical Model for Risk Management of Sales Channels of Small Enterprises* ____ 63

4. **K. Nowakowska** – *Some properties of openly ϱ-continuous functions* ____ 73

5. **Y. Povstenko** – *Harmonic impact on the surface of a half-plane in the framework of Time-Fractional Heat Conduction* ____ 85

6. **B. Staruch, B. Staruch** – *X-maximal congruences and relevant sets for algebras* ____ 93

7. **K. Troczka-Pawelec, I. Tyrala** – *On the alienation of the Cauchy equation and the Lagrange equation* ____ 105

Part III – Computer Science

1. **A. Kozakiewicz, M. Kurkowski** – *On Security Properties of RC5 cipher's Non Standard Modifications* ____ 115

2. **M. Selianinau** – *Application of modular computing technology to nonlinear encryption in cryptographic systems of informational security* 123

3. **L. Stępień, M. R. Stępień** – *From arithmetic expressions to propositional formulae* 135

4. **A. Tikhonenko-Kędziak, M. Kurkowski** – *Some Remarks of Different Aggregation Modes Applications Within the Framework of Intuitionistic Fuzzy Weights* 145

5. **B. Woźna-Szcześniak, I. Szcześniak** – *On the SMT-based Verification of Communicative Commitments* 161

6. **A. M. Zbrzezny** – *A comparison of SMT-solvers for timed weighted interpreted systems* 193