

PRACE NAUKOWE

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W CZĘSTOCHOWIE

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A Formalization of a Logic without Tautologies

Preface

gorz Bryll, Agnieszka Cholewicka, Leszek Jaworski

We are going to prove that the logic determined by a certain logical matrix is identical to the logic based on a system of rules. In our proof we

use A long time the Institute of Mathematics and Computer Science of Częstochowa Pedagogical University collaborates with the Faculty of Education of J.E.Purkyně University in Ústí nad Labem (Czech Republic). This issue contains the extended papers presented at the VII Polish-Czech Mathematical School (Częstochowa, 5-8 June 2000) and shows a broad cross-section of scientific interests and results. The lectures at the Conference were grouped into two Sessions: „Mathematics and Applications” and „Mathematics Teaching”. According to these topics the papers are also divided into two parts. The fourteen contributions contained in the first part are representative of researches made in algebra, logic, computer security, queueing systems and numerical mathematics. The nine papers contained in the second part address the advances in modern methods and technologies used to teach mathematics both in Poland and Czech Republic.

The editor of this issue is indebted to the authors for the effort in preparing their contributions, and to the reviewers for their useful comments and suggestions. It is the earnest hope that research in the fields presented in this issue, as well as cooperation between Polish and Czech colleagues, will broaden.

$\alpha \in C_{\text{gr}}(X) \Leftrightarrow \forall h \in \text{Hom}(A(X) \subseteq \{a\} \Rightarrow h(\alpha) = a)$,
for every $\alpha \in L$ and every $X \subseteq L$.

The function $C_{\text{gr}}: 2^L \rightarrow 2^L$ has the following properties:

Lemma 1

a. $X \subseteq C_{\text{gr}}(X)$.

b. $X \subseteq Y \Rightarrow C_{\text{gr}}(X) \subseteq C_{\text{gr}}(Y)$.

c. $C_{\text{gr}}(C_{\text{gr}}(X)) \subseteq C_{\text{gr}}(X)$.