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About one theorem of V. Novák

Czechoslovak Mathematical Journal, Vol. 15 (1965), No. 4, 596

Persistent URL: <http://dml.cz/dmlcz/100697>

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ABOUT ONE THEOREM OF V. NOVÁK

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(Received September 10, 1965)

In the preceding article of V. NOVÁK it is possible, by a small adjustment of the proof, to substitute the theorem 2 by the following one:

Theorem. *A quasi-ordered set of type $F(\omega_\alpha, \aleph_\alpha)$ is an \aleph_α -universal quasi-ordered set.*

Proof. For $\alpha = 0$ this assertion follows from the theorem 3 of the preceding article.

For $\alpha > 0$ we obtain this assertion as follows¹⁾:

To the element $\Psi(X) = \{a_\lambda \mid \lambda < \omega_\alpha\}$ we construct a class $\widetilde{\Psi(X)}$ as the set of all sequences, which we obtain from the sequence $\{a_\lambda \mid \lambda < \omega_\alpha\}$ by laving the sequence $\{a, b, a, b, \dots\}$ or the sequence $\{b, a, b, a, \dots\}$ of type ω_0 after each element a_λ . Each element $\xi \in \widetilde{\Psi(X)}$ for all $X \in \vec{G}$ is from $F(\omega_\alpha, M \cup N)$. The cardinality of $\widetilde{\Psi(X)}$ is 2^{\aleph_α} . For $\Psi(X) \leq \Psi(Y)$ and $\xi \in \widetilde{\Psi(X)}$, $\eta \in \widetilde{\Psi(Y)}$ holds $\xi \leq \eta$. For every $X \in \vec{G}$ there exists also a one-to-one mapping φ_X of the class X into the class $\widetilde{\Psi(X)}$. The mapping φ of the quasi-ordered set G into $F(\omega_\alpha, M \cup N)$ defined in the following way: $\varphi(x) = \varphi_X(x)$ for $x \in X \in \vec{G}$, is an isomorphism.

РЕЗЮМЕ

К ОДНОЙ ТЕОРЕМЕ В. НОВАКА

ЛАДИСЛАВ МИШИК (Ladislav Mišík), Братислава

В предыдущей статье теорему 2 можно заменить следующей теоремой:

Теорема. *Квазиупорядоченное множество типа $F(\omega_\alpha, \aleph_\alpha)$ является \aleph_α -универсальным квазиупорядоченным множеством.*

¹⁾ We use distinctions of the preceding article.