Trudy Instituta Matematiki i Mekhaniki UrO RAN

Vol. 29 No. 1 2023

MSC: 20D10; 20E28

DOI: 10.21538/0134-4889-2023-29-1-254-258

FINITE GROUPS WITH ABSOLUTELY $\mathfrak{F}$-SUBNORMAL MAXIMAL SUBGROUPS

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A subgroup M of a group G is an n-maximal subgroups of G if there is a subgroup chain $M = M_n \leq M_{n-1} \leq \ldots \leq M_1 \leq M_0 = G$ such that M_{i+1} is a maximal subgroup of M_i. We establish a criterion for a group with absolutely $\mathfrak{F}$-subnormal n-maximal subgroups to belong to a subgroup-closed saturated formation $\mathfrak{F}$ containing all nilpotent groups.

Keywords: finite group, maximal subgroup, subnormal subgroup.

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Received November 9, 2022
Revised January 20, 2023
Accepted January 30, 2023

Funding Agency: This work was supported by the Ministry of Education of the Republic of Belarus (Grant number 20211467).

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Cite this article as: I. L. Sokhor. Finite groups with absolutely $\mathfrak{F}$-subnormal maximal subgroups, *Trudy Instituta Matematiki i Mekhaniki UrO RAN*, 2023, vol. 29, no. 1, pp. 254–258 .