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## Finite Groups with P-Subnormal Schmidt Subgroups

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**Abstract**—A subgroup H of a group G is called  $\mathbb{P}$ -subnormal in G whenever either H = G or there is a chain of subgroups

$$H = H_0 \subset H_1 \subset \ldots \subset H_n = G$$

such that  $|H_i: H_{i-1}|$  is a prime for every i = 1, 2, ..., n. We study the structure of a finite group G all of whose Schmidt subgroups are  $\mathbb{P}$ -subnormal. The obtained results complement the answer to Problem 18.30 in the Kourovka Notebook.

**Keywords:** finite group,  $\mathbb{P}$ -subnormal subgroup, Schmidt subgroup, saturated Fitting formation.

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