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*FC-groups all of whose factor groups are residually finite.* (English)

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A group  $G$  is said to be ‘strongly residually finite’ if every quotient of  $G$  is residually finite. This is equivalent to requiring each normal subgroup to be closed in the profinite topology on  $G$ . Examples of strongly residually finite groups include: direct products of finite non-Abelian simple groups, periodic FC-groups with finite Sylow subgroups and finitely generated Abelian-by-polycyclic-by-finite groups.

In this article the authors study FC-groups which are strongly residually finite in the case where the groups are also locally nilpotent, locally soluble or metahypercentral. We quote one result. Theorem A: Let  $G$  be a locally nilpotent group. Then  $G$  is strongly residually finite if and only if there is a finitely generated  $G$ -central subgroup  $V$  such that  $G/V$  is a direct product of center-by-finite groups of finite exponent.

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