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Section:

2. Algebra

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Multiplicative Subgroups of Division Rings

Let D be a finite dimensional division ring over its center F. As a generalization of Wedderburn's theorem it is proved that non-centeral normal subgroups of division rings can not be finitely generated. We conjecture that every division ring has at least one maximal subgroup. It seems that maximal subgroups of any non-commutative division ring can not be solvable. Also it is shown that if a maximal subgroup of $D^* = D - \{0\}$ is radical over F then D is commutative.