

# Irreducible Compositions of Polynomials Over Finite Fields of Even Characteristic\*

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## Abstract

This note presents some results with the constructive theory of synthesis of irreducible polynomials over a Galois field with even characteristic. We prove a theorem that plays an important role for constructing irreducible polynomials. By this theorem a recurrent method for constructing families of irreducible polynomials of degree  $n2^k$  ( $k = 1, 2, \dots$ ) over  $F_{2^s}$  is proposed.

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Զույգ բնութագրիչով չքերվող բազմանդամների բաղադրություններ  
վերջավոր դաշտերի վրա

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### **Ամփոփում**

Այս աշխատանքը ներկայացնում է վերջավոր դաշտերի վրա զույգ բնութագրիչով չքերվող բազմանդամների սինտեզման կոնստրուկտիվ տեսության որոշ արդյունքներ: Մենք ապացուցել ենք թեորեմ, որը մեծ դեր է խաղում չքերվող բազմանդամներ կառուցելուց: Այս թեորեմի օգնությամբ առաջարկվում է  $n2^k$  ( $k = 1, 2 \dots$ ) աստիճանի չքերվող բազմանդամ կառուցելու ռեկուրենտ մեթոդ: