

**PROJECTIVITY OF THE ABSOLUTE GALOIS  
GROUPS OF MULTI-VALUED FIELDS***Yu. L. Ershov*

In the article, we establish the projectivity property for the enriched Galois groups of multi-valued fields having a near Boolean family of valuation rings and satisfying the arithmetic local-global principle  $LG_A$ . This property extends the corresponding property that was proved by the author for the case of Boolean families. As application, we give a sufficient condition for the inverse Galois problem to be solvable. This condition can be applied in particular to the wonderful extensions of the field of rational numbers.

*Key words and phrases:* projectivity,  $\delta$ -group, multi-valued field, local-global principle.

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Received

June 24, 2002

Translated into English:

*Siberian Advances in Mathematics*, V. 14, N 1, 1–6 (2004).