

Spring Lecture Series N.23

Combinatorial Methods in Algebra (1998)

Principal Lecturer: Efim Zelmanov, Yale University

Contributions by:

Efim Zelmanov

Title: On the Burnside Problem

Lance Small

Title: Reductive Groups, Engel Conditions and Ring Theory

Robert Wilson

Title: Invariant Polynomials in the Free Field

Efim Zelmanov

Title: What Makes a Group Finite?

George Bergman

Title: Is There a Dual to the Diamond Lemma?

Georgia Benkart

Title: Quantum Quaternions and Octonion Algebras

Hyman Bass

Title: "Math Wars": Can America Create a Rational Process For Improving Mathematics Education?

Efim Zelmanov

Title: Growth of Algebras

Hyman Bass

Title: A Super-Rigid Non-Lattice

J. Toby Stafford

Title: Invariant Differential Operators on Symmetric Spaces

Victor Kac

Title: Classification of Infinite-Dimensional Groups of Supersymmetries

Efim Zelmanov

Title: The Locality Condition

Inna Sysoeva

Title: Irreducible Representations of Braid Groups of Unirank Two

Martin Dixon

Title: Groups That Are Covered By Non-Abelian Simple Groups"

David Riley

Title: Semigroup Identities and the Engel Condition in Associative Algebras and Their Group of Units

Yuri Medvedev

Title: On Compact Periodic and Engel Groups

Martin J. Evans

Title: Presentations of Free Groups in Soluble Varieties

Arturo Magidin

Title: Dominions in Varieties of Nilpotent Lie Groups

Stuart A. Steinberg

Title: On the Scarcity of Lattice-Ordered Matrix Algebras II

Olga Poliakova

Title: A New Construction for Free Inverse Semigroups

Zinovy Reichstein

Title: Can a General Polynomial be written as " $x^n - ax^{n-2} + O(x^{n-4})$?"

Jie-Tai Yu

Title: Recognizing Coordinates in Polynomial Algebras

Vyacheslav Futorny

Title: Verma Types Modules for Affine Lie Algebras and Their Quantizations

Alexander Stolin

Title: Frobenius Algebras and Yang-Baxter Equation

Alexander Berkovich

Title: Trinomial Analogue of Bailey's Lemma and q-Series Identities