

North Carolina State University
Mathematics Department
ALGEBRA SEMINAR

February 14, 2001
Wednesday

Prof. Gail Melikian
NCCU

Simple Exceptional Lie Algebras of Small
Characteristics

ABSTRACT: The completion of the classification of simple modular Lie algebras over the field of characteristic $p \neq 7$ (R. Block, R. Wilson for restricted case and H. Strade no restricted case) and recent progress in the classification of simple Lie algebras of small characteristics (H. Strade and A. Premet) proved the remarkable conjecture by Kostrikin-Shafarevich on the structure of finite dimensional simple Lie algebras. Existence of exceptional modular simple Lie algebras in small characteristics (2, 3, and 5) makes the problem significantly complicated. Even in characteristic 5, where the only known exception is Melikian algebras the classification still awaits his completion. Our goal is to present some results concerning the Melikian algebras, which made impossible direct adaptation of Black-Wilson's technique for characteristic $p = 5$.

2:30-3:20 p.m. HA 335

Faculty and Graduate students are invited to attend.

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<http://www.math.ncsu.edu/~jing/Seminar/alg.html>

Refreshments immediately after the seminar