Università degli Studi della Basilicata
Dipartimento di Matematica, Informatica ed Economia

Seminario Interdisciplinare di Matematica

Si avvisano gli interessati che ***Mercoledì 16 Luglio 2014 alle ore 17:30*** nell'Aula n. 39 del Dipartimento, il

Professor Plamen KOSHLUKOV
(State University of Campinas)

terrà la conferenza dal titolo

Group actions on Lie algebras and their identities

Summary. Let G be a finite group acting faithfully on the 3-dimensional simple Lie algebra sl_2 over the field of the complex numbers. A classical result of F. Klein (1884) states that then G must be one of the following groups: C_n, the cyclic group of order n, D_n, the dihedral group of order $2n$, A_4, S_4 and A_5. Here S_n and A_n are the symmetric and the alternate groups on n letters, respectively. It is of importance to describe the G-identities of sl_2, that is the identities with the corresponding group action. The analogous problem for the associative algebra of the 2×2 matrices was studied and solved by Berele (2004). Here we describe in each of the above cases for G, a basis of the G-identities of sl_2. We note that the methods we use rely on the description of the graded identities of sl_2. Most of the contents of the talk is a joint work with A. D. Mattos Mortari.

Il Direttore del Dipartimento