Università
degli Studi
della Campania
Luigi Vanvitelli

Dipartimento di
Matematica e Fisica

AVVISO DI SEMINARI

Mercoledì 6 aprile, a partire dalle ore 15:00, in aula Magna, si terrà un pomeriggio di seminari in Teoria dei Gruppi.

Il programma è il seguente:

Gunnar Traustason (University of Bath, UK)
Powerfully nilpotent, solvable and simple groups

Abstract: In this talk we discuss a special subclass of powerful groups called powerfully nilpotent groups. These are finite p-groups that possess a central series of a special kind. We will describe some structure theory and a 'classification' in terms of an ancestry tree and powerful coclass. One can view powerfully nilpotent groups as the powerful analogue of nilpotent groups. There is likewise a natural powerful analogue of solvable groups, "powerfully solvable groups", that we will also discuss briefly. For a special situation one can also introduce "powerfully simple groups".

Marco Trombetti (Università degli Studi di Napoli "Federico II")
Generalized Nilpotency in Uncountable Groups

Abstract: What happens if all proper uncountable subgroups of a group are (bounded) Engel groups? What if they are hypercentral? The aim of the talk is to discuss these questions and related ones.

Carmine Monetta (Università degli Studi di Salerno)
The solubilizer of an element in a finite group

Abstract: The solubility graph associated with a finite group G is a simple graph whose vertices are the elements of G, and there is an edge between two distinct vertices if and only if they generate a soluble subgroup.
The aim of this talk is to present some new results related to the solubility graph, underlining how graph properties affect the structure of the whole group. In particular, we will focus on the solubilizer of an element, that is, the set of neighbors of a vertex, investigating both arithmetic and structural properties of this set.
This is a joint work with Banafsheh Akbari and Costantino Delizia.

I proponenti
Maria Ferrara, Alessio Russo e Antonio Tortora