Insalate di Matematica *presents*

Hopf algebras, Galois modules, and skew braces



14:00 - 10/03/2022 U5 - Room 3014 and Webex meeting

Università di Milano Bicocca

Abstract

In this talk, we deal with a quite recent and active area of Mathematics connecting different theories by mean of apparently distant topics: Hopf algebras (abstract algebra), Galois modules (number theory), and skew braces (group theory). For each part we give the main definitions, we overview the important results and connections with the other topics, and we present open problems and directions. At the end, we briefly discuss about a joint work with A. Caranti, where some new constructions are introduced.



Keywords:

Hopf algebras · Hopf-Galois extensions · Galois modules · associated orders · skew braces · the Yang-Baxter equation

"Obvious" is the most dangerous word in mathematics. - Eric Temple Bell

