

***DISCRIMINANTS, DISCRIMINANT IDEALS AND THEIR  
APPLICATIONS***

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**Time: Wed, Oct 30th, 15:00 - 15:30**  
**Venue: Room 102, SCMS**

**Abstract:**

Discriminants and discriminant ideals are key invariants in an algebra  $A$  that is a finite module over a central subalgebra  $C$  with trace  $tr: A \rightarrow C$ . Discriminant ideals are more general than discriminants and carry important information about irreducible modules of  $A$  over maximal ideals of  $C$ . We study the lowest discriminant ideal in Cayley-Hamilton Hopf algebras and apply the results to group algebras of central extensions of Abelian groups and quantum groups at roots of unity.