

LECTURES ON RINGS, MODULES AND ALGEBRAS



PROF. CHRISTIAN LOMP

Department of Mathematics, Faculty of Science
University of Porto

APRIL 22, FRIDAY

ARTINIAN RINGS

(10:00-12:00)

- * Finite length modules
- * Hopkins-Levitzki Theorem
- * Injective and projective modules
- * Global dimension of a ring
- * Wedderburn-Artin Theorem

GROUP RINGS

(14:00-15:30)

- * Semigroup rings
- * Maschke's Theorem
- * Blocks of a group ring of a finite group
- * Injectivity of group rings

APRIL 25, MONDAY

QUASI-FROBENIUS RINGS

(13:30-15:45)

- * Basic idempotents and Morita equivalence of rings
- * Kasch and quasi-Frobenius rings
- * Nakayama permutation
- * Finite dimensional Frobenius algebras

**PLACE: Seminar Room,
Department of Mathematics**

**Organizers: Engin Büyükaşık
Sinem Benli-Göral**