

## FATIH UNIVERSITY

Department of Mathematics Seminars on Codes, Cryptography and Combinatorics

## Dear Colleagues,

You are cordially invited to attend the following seminar organized by the department of mathematics.

Speaker : Assoc. Prof. Tevfik BİLGİN

**Title** : Codes over Group Rings

**Abstract** : In this talk, we will give codes over group rings of non-abelian groups over  $\mathbb{Z}_n$ , where *n* and the order of group are relatively prime. We first focus on the decompositions of group rings and codes obtained from these decompositions. Later on, we use extended representations of group rings to get more specific subrings and ideals. We will give some examples for groups  $S_3$ ,  $D_4$  and  $A_4$ .

