

## ÇANKAYA UNIVERSITY FACULTY OF ARTS AND SCIENCES DEPARTMENT OF MATHEMATICS

## **SEMINAR**

## "MHD PROBLEMS in 2-D and 3-D FLOW GEOMETRIES"

**SPEAKER** : Prof. Dr. Fatma AYAZ Department of Mathematics, Faculty of Sciences, Gazi University, Ankara, TÜRKİYE

**DATE** : 22 December 2017

**TIME** : 15:00

PLACE : Çankaya University (Central Campus), R-213

**ABSTRACT** : Magnetohydrodynamics, also called MHD, is the physical mathematical framework that concern the Dynamics of magnetic fields in electrically conducting fluid. Here, we investigate the MHD flow problems for different flow geometries in terms of different flow parameters. Therefore, 2-D MHD flow through parallel plates and 3-D MHD flow through parallel disks with the presence of heat transfer effects have been solved by using Differential Transform method, which is an algebraic way for obtaining Taylor series coefficients of an analytical function. Then, the obtained results have been plotted and analyzed for different flow parameters.

## All interested are cordially invited.