

Hacettepe University Department of Mathematics

GENERAL SEMINAR

Aytekin Bayram Çıbık

Gazi University Türkiye

Finite Element Approximations and FreeFem Programme Package



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Hacettepe University Dept. of Mathematics Yaşar Ataman Hall The main aim of this talk is to introduce the finite element software FreeFEM. FreeFEM is a partial differential equation solver for non-linear multi-physics systems in 1D, 2D, 3D and 3D border domains (surface and curve). Problems involving partial differential equations from several branches of physics, such as fluid-structure interactions, require interpolations of data on several meshes and their manipulation within one program. FreeFEM includes a fast interpolation algorithm and a language for the manipulation of data on multiple meshes. FreeFEM is written in C++ and its language is a C++ idiom.