



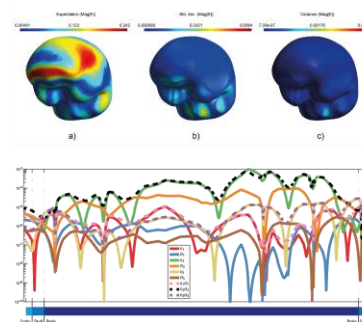
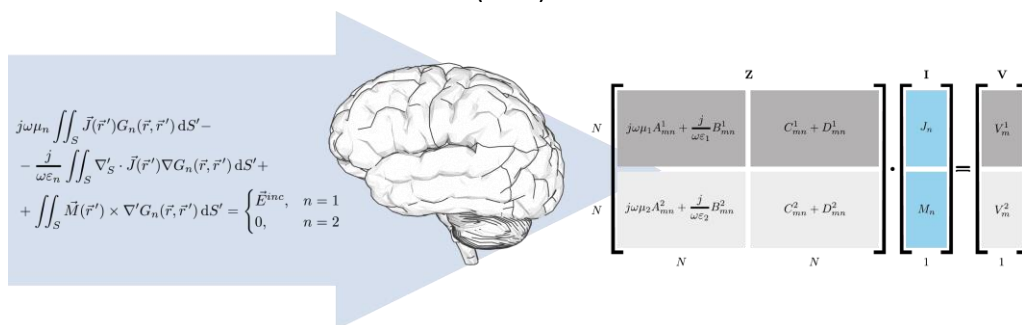
SPLIT SUMMER SCHOOL 2023

COURSE: NUMERICAL METHODS IN ELECTROMAGNETICS

Contact person: **Dragan Poljak** dpoljak@fesb.hr
phone: +385 91 4305 698

Main topics:

- Introduction to Computational Electromagnetics (CEM)
- Domain discretisation methods, Finite Differences, Finite elements
- Boundary discretisation methods, Boundary Elements
- Integral equation methods, Method of Moments
- Stochastic Collocation Method (SCM)



Programme structure:

- 5-day course
- Sample data will be provided for practice and for final presentation
- Every student gets lecture notes bound into a booklet, as well as a CD containing a digital version of the booklet

Important dates:

Course dates: 05/09/2023 – 09/09/2023
Deadline for application: 01/08/2023
Confirmation of the course: 15/08/2023
Payment due by: 24/08/2023

Price of the course: 300 € (tax included)

Programme plan:

Day 1

- Introduction to domain, boundary and source discretization methods, Finite Difference Method (FDM), Finite Difference Time Domain (FDTD) method (3h)
- Individual work/exercise (1h)

Day 2

- Finite Element Method (FEM), Boundary Element Method (BEM), Hybrid Element Methods (HEM) (3h)

Programme lecturers:

D.Poljak, Ph, D,
Full Professor at the University of Split, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, Split, Croatia.
M. Cvetković, PhD

- Individual work/exercise (1h)

Day 3

- Integral Equation Method, Method of Moments (MoM) (3h)
- Individual work/exercise (1h)

Day 4

- Stochastic Collocation Method for Uncertainty Quantification and Sensitivity Analysis (3h)
- Individual work/exercise (1h)

Day 5

- Students' final projects (3h)
- Final presentations (1h)

Assistant Prof, at the University of Split, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, Split, Croatia.

Anna Šušnjara, PhD Student,

Teaching/research assistant at the University of Split, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, Split, Croatia.