

# CAPITOLE-RF

Antenna design software



**VOLTA**<sup>®</sup>

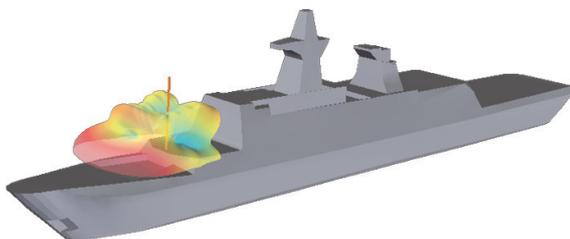
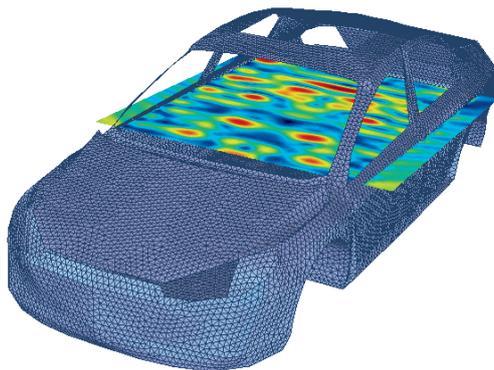
S.p.A.

Competenza ed entusiasmo per soluzioni tecniche



## 5 Reasons to choose CAPITOLE-RF

- **Fast:** ACA compression and parallelization allow to speed up the calculation
- **Accurate:** Fully validated with measurement results on real mock-up
- **Innovative:** New method from research labs
- **Powerful:** Compute very large models
- **Easy:** Dedicated graphical user interface with modern layout



## Software resulting from innovative projects

### PEA IASP (2008-10)

- Antennas on naval platform

### CAPITOLE-EM (2012-14)

- Antennas with dielectric material (patch)
- Validation with measurement in anechoic chamber

### CAPITOLE-HPC (2012-13)

- Solver on supercomputer for large model

## SOFTWARE OFFERS

*Standard license*

*License with specific development*

## SERVICES OFFERS

*Support*

*Maintenance*

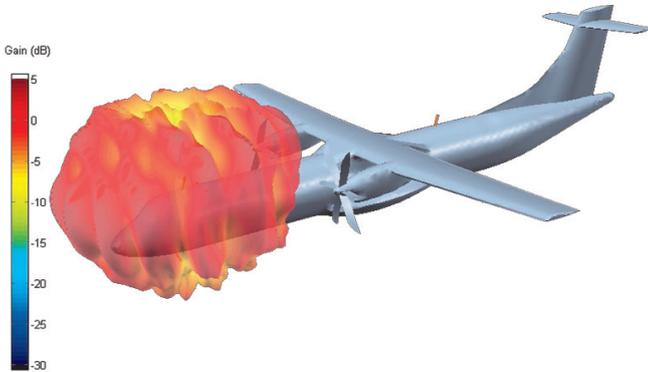
*Training*



# CAPITOLE-RF

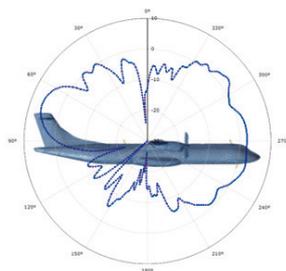
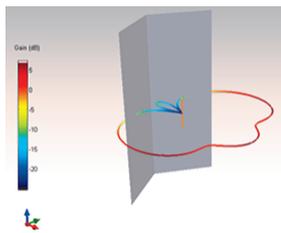
Antenna design software

**NEXIO**  
Electromagnetism is our thing



## Results:

- Impedance
- 3D Pattern or 2D cut
- Gain / Directivity / VSWR
- Reflexion coefficient
- Frequency bandwidth
- Coupling
- Electromagnetic field: E and H

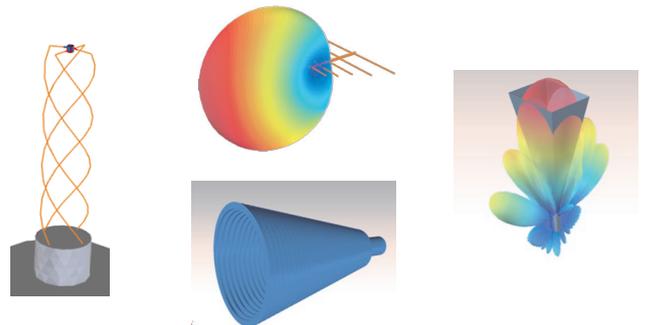


## DESIGNER component:

- Antenna library
- Complex antenna design
- Geometry importation from CAD software
- Mesh generation

## Antenna placement optimization:

- Coupling between antennas on a structure
- Radiation hazard, ICNIRP guidelines for limiting exposure



## POSTPRO3D component:

- Results analysis
- Polar and cartesian 2D plots
- 3D pattern display
- Curves comparison, annotations
- Surface current's display
- Display of Electric and magnetic field mapping
- Image exportation
- Export data in CSV format

## Solver:

- Based on Method of Moments (MoM)
- Triangle and wire mesh elements
- Matrix compression: Adaptive Cross Approximation algorithm (ACA)

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