Antenna Toolbox for MATLAB

AToM

In the beginning, Atom (Antenna Toolbox for MATLAB) package was build upon the characteristic modes (CMs) solver developed at the ELMAG department. Nowadays, AToM is much more than that...

AToM Features

Apart from standard antenna tools, many advanced and unique features are available: symmetry treatment based on point group theory, adaptive modal tracking, matrix operators for stored energy, dipole moments and ohmic losses, multiprecision treatment of modal decomposition.

AToM Versatility

Atom can fully be controled via Graphic User Interface. Advanced user can nevertheless access all features from their own scripts.

AToM Results

Data acquired from AToM solver can be processed with many build-in visualization tools.

AToM Applications

ATOM can effectively deal with real-life applications like antenna positioning on a chassis of a car or RCS study (in both cases the first characteristic mode is depicted).

Are you interested in AToM? Visit our web page!
Would you like to participate on the development of AToM? Contact us directly!

www.antennatoolbox.com

Following projects

Following AToM-based project focuces on implementation of new progressive components dealing with:

- precise model for ohmic losses,
- electromagnetic design based on topology sensitivity,
- characteristic modes for dielectrics,
- antenna pixelling techniques,
- coupling between electrically small and large objects using spherical expansion.

Photo of the team. (from left to right: Miloslav Čapek, Vladimír Šeděnka, Petr Kadlec, Pavel Hazdra, Lukáš Jelínek, Vít Losenický, Jaroslav Rýmus, Viktor Adler, Martin Strambach, Michal Mašek)