

Center for Collective Usage «Applied Classical Electromagnetism and Antenna Measurements»

Information

Field of research - Applied Classical Electromagnetism and UWB (Ultra-wideband) Antenna Measurements in time and frequency domains, near(-field) and far-field zones.

Research directions:

- Research and development of the radiating electrodynamic structures, radio wave control equipment and non-linear microwave devices.
- Analysis and synthesis of antennas and reflectors on the basis of impedance structures with specified data of radiation and dispersion.
- Antennas with reduced radar visibility.
- Development of the electrodynamic structures providing the reduction of radar visibility.
- Computer-aided design of antennas, phased arrays, reflectors and electrodynamic structures with specified data of radiation and dispersion, including defined non-linear, spectral and polarizing properties.
- Methods of solving problems of analysis and synthesis of the phased array.
- Computer-aided design of microstrip antennas and structures; theory and methods of analysis and synthesis of microwave multipoles.
- Generation, amplification and transformation of microwave oscillations.
- Structure synthesis of passive microstrip frequency-selective microwave devices.
- Computer technology for scanning electromagnetic fields in near(-field) and far-field zones, in time and frequency domains.