EMPIRE XPU 9.1.0 Release

January, 2025

Enhancements

- General:
 - EM Twin Add-On
 - o Automatic Mesh Accuracy and Quality Check
 - New KMF Scripting interface
 - Windows 11 support
- GUI:
 - Limit jobs in Remote Server Use
 - o Display Port Numbers in Group List
 - o New Internal Variables for Frequency and Wavelength
 - Inclusion of Logo in Design Modes
 - More robust Save/Load of emx-projects
 - o Material Database Update
 - o Import and Export of View Setting in 3D Design mode
 - o Improved Arrow Display in 3D Design Mode
 - o Remember Plane in Mirror Operation
 - Import of Port Array Data in Array Setup
 - o New Library Element (Twisted Ellipse)
 - Create Library Elements with multiple input arrows
 - o Improved automatic meshing for Gabriel tissues
 - o Rename variable improvements
 - Improved labels for wire ports
 - Property editor improvements
 - Adjustable RAM limit in Multi-PC simulation
- Import / Export
 - Large CAD Importer
 - Updated CADCON libraries (Spatial release 2025)
 - Extended NC-Drill Import options (file endings, float format)
 - Improved Group Display after ODB Import
- Simulation engine:
 - Waveguides supporting magnetic walls
 - Warning for Recording Frequency larger than End Frequency
 - o Improved Field Monitor Convergence Check
 - Plane Wave Phase Reference
- Postprocessing
 - Print lumped port impedance in Log Window
 - Improved MIMO correlation processing
- 2D result plotting engine:
 - Fixed overflow error for plot data export
 - o Improved graph display for sweep plots reload
- 3D result plotting engine
 - Allow to display huge dump boxes
 - Move Plane and Marker to maximum Values

- o Display of Far Field Cuts in 3D Results
- Circuit simulation module and schematic editor
 - New Transmission Line Element
- EM Twin Add-on
 - Inclusion of Wizards for EM-Twin
 - Automatic Reflector Distance Setup
 - o EM Twin Tutorials
 - o Tissue selection in Exposure Wizard
 - Improved rotation for sources
- Documentation and Installation
 - Updated Example Tree
 - Updated Antenna Design Guide
 - New Application Notes
 - Updated Tutorial Tree
 - Updated Getting Started
 - Thermal Examples