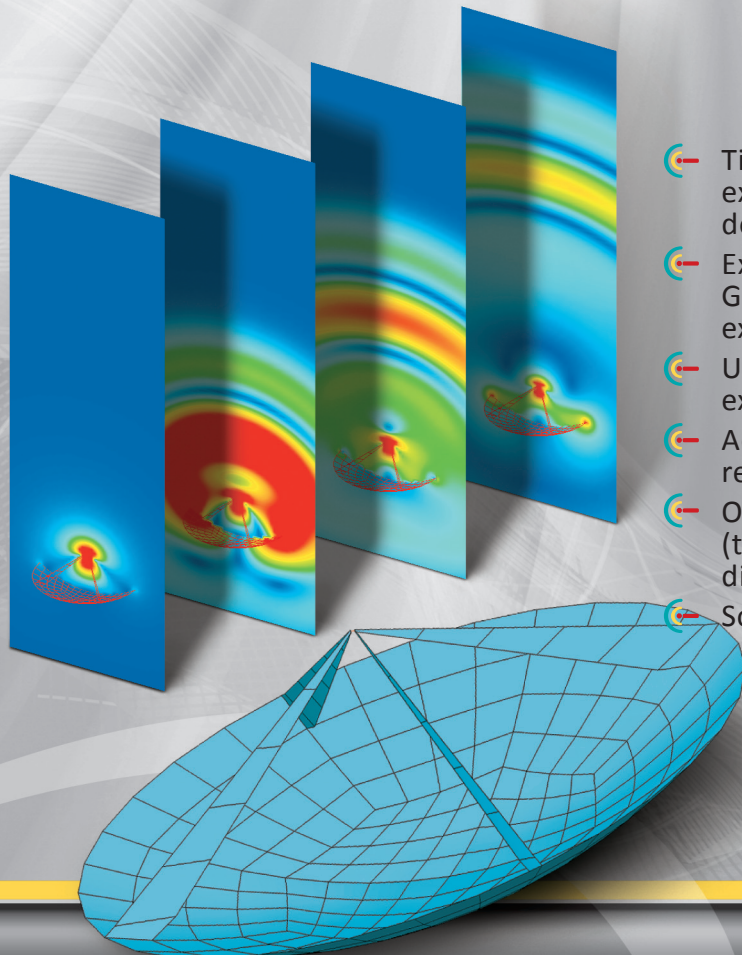
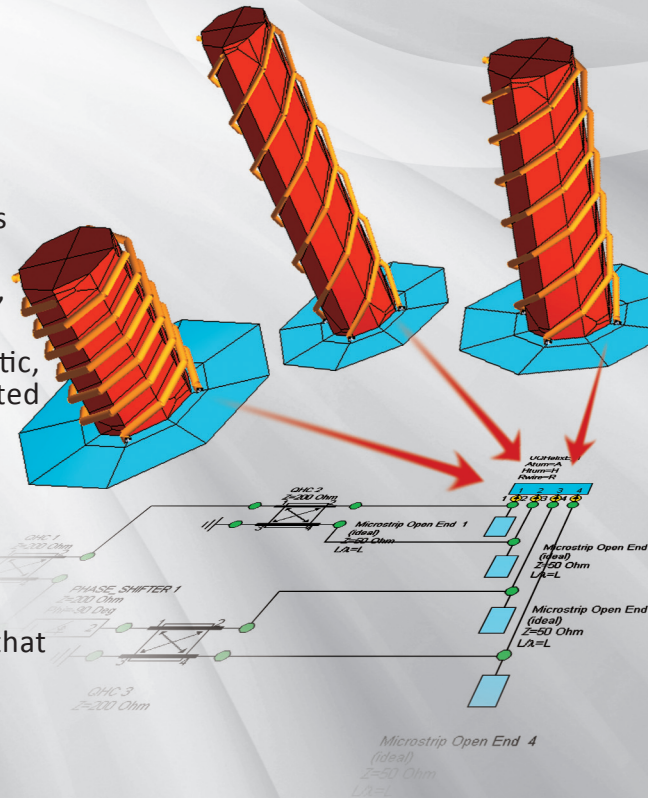




*Adjust WIPL-D suite  
to meet your needs*

## Optimizer

- Powerful multi-algorithm optimization tool which calculates both a single solution and multiple solutions for complex, multi-criteria optimizations
- Enables a high level of design automation of antennas, antenna systems, scatterers or microwave circuits.
- Built-in optimization algorithms: Particle Swarm, Genetic, Simplex, Random, Random, Systematic Search, Simulated Annealing, Gradient
- Hybrid optimization (involving two consecutive optimization algorithms which increases optimization efficiency)
- Pareto fronts (set of the best compromises in a multi-criteria optimization)
- Estimation of local minima (keeping several solutions that are in some proximity of the best found solution)
- Optimization repetitions (multiple optimizations from random starting points)



## Time Domain Solver

- Time-domain response to predefined or user-defined excitation pulses is computed by using frequency domain analysis and Fourier transform
  - Excitation specified from many predefined waveforms: Gaussian pulse, Gaussian monocycle, rectangular and exponential pulses and sinusoidal wave
  - User-friendly GUI with wizard (fast learning curve) and expert modes
  - Advanced multi-algorithm optimization of time-domain response
  - Output results visualization within WIPL-D environment (tables and graphs of network parameters, current distribution, far fields, near fields,...).
- Some of Time Domain Solver applications:
- Design and analysis of ultra-wide band (UWB) antennas
  - EM compatibility problems, EM interference problems, EM pulse investigations
  - Cross-talk analysis and signal integrity