

ESL Faculty



Betty Lise Anderson, Professor

Ph.D., University of Vermont

Photonics, true time delays for phased array antennas, and optical cross-connects. Optical code division multiple access and quality of signal monitoring in optical networks. Optical devices.



Joel Johnson, Associate Professor

Ph.D., MIT

Remote sensing of geophysical media and application of numerical techniques for electromagnetics to remote sensing.



Jin-Fa Lee, Associate Professor

Ph.D., Carnegie Mellon University

Computational methods and computational geometry, including PDE methods, integral equation methods, numerical linear algebra, and 3D Finite Element Methods for electromagnetics.



Robert Lee, Professor

Ph.D., University of Arizona

Numerical techniques for electromagnetics, including hybrid methods, boundary truncation techniques and error analysis of FEM. Application of these techniques for analysis of jet inlet scattering and design of mine detection antennas and coils for high field MRI.



Edward Newman, Professor

Ph.D., The Ohio State University

Numerical solution of EM radiation and scattering problems using integral equations and MoM techniques. Development of computer programs for radar cross section, radiation, and shielding studies of general objects.



Prabhakar Pathak, Professor

Ph.D., The Ohio State University

Development of uniform asymptotic high frequency solutions and hybrid methods for antenna and scattering problems associated with large complex structures, such as aircraft. Development of Gaussian beam solutions for large antennas and conformal arrays.