Innovative Use of Metamaterials in Confining, Controlling, and Radiating Intense Microwave Pulses

Integrated Technologies

Directed Energy ▴ Defense & Civilian Radar Communications ▴ Accelerator Research
Fundamental Scientific Research

Technology Base

Charging & Damage
Waveform Diversity
Significant Losses
Superior Results

FY’12 MURI
Transformational Electromagnetics

University of California
Irvine

MTMs design

LSU
Louisiana State University

MTMs design and characterization, antennas

UNM
Electrical & Computer Engineering

High Power VEDs, MTMs, plasma diagnostics

MIT
Massachusetts Institute of Technology

VEDs, MTMs

Consortium PIs:
Professor Edi Schemiloglu
University of New Mexico

Program Managers:
Dr. Arje Nachman, AFOSR
Dr. John Luginskiand, AFOSR