

## **Biographical Sketch**

Dr. Pidwerbetsky is Technical Manager of the Communications Science and Technology Group in Lucent's Bell Laboratories. He was previously a Distinguished Member of Technical Staff at Bell Labs. He is currently the Principal Investigator for the effort described here in trying to achieve very high spectral efficiencies in outdoor environments using BLAST Technology under DARPA's Next Generation Internet program. Previously, he was the Principal Investigator for a DARPA effort integrating the low-cost wireless infrastructure enabled by RF tag technology with sensors on a chip (MEMS), creating a new generation of wireless distributed sensor networks. He has also conducted concept definition, studies and analyses in support of a number of other wireless communications projects. He has also developed a number of models and simulations of propagation, scattering and system performance.

He is the co-inventor for 2 issued and 2 pending US patents in the area of wireless communications. His Ph.D. dissertation was on simulation and analysis of wave propagation through random media. He has co-authored papers on diffractive and refractive scintillation and chaotic wave propagation. While at Cornell he was a research assistant at the Center for Radiophysics and Space Research and the Laboratory for Plasma Studies. Previous to that he was a researcher at General Electric's Corporate Research and Development Center.

### **Education:**

Ph.D., Applied Physics w/Applied Mathematics minor, Cornell University, 1987.

M.S., Applied Physics, Cornell University, 1984.

B.S., Physics w/Mathematics minor, Rensselaer Polytechnic Institute, 1980, Summa Cum Laude.