Title: Biological Coding Theory: The Emerging Paradigm?

Manish K. Gupta, Arizona State University
(Invited)

After the discovery of Shannon's Information theory in 1948 there was a lot of excitement about its application in biology. Motivated by the discovery of genetic codes even several people worked on comma-free codes (example, Golomb). However this trend could not continue further and people found around 1956 that application of Shannon's ideas to biology has not yielded much results. Similar things happened to Coding theory. Now after 50 years our understanding of biology is increasing day by day and we have sequenced first time genome of mouse and man. Biology is at the place where chemistry was about 200 years back. In this talk we will explore how far we have come in this area giving known results and possibly posing several open questions.

Place: DIMACS Center, Rutgers University, Piscataway, NJ
Date: December 2003
Meeting: DIMACS Workshop on Algebraic Coding Theory and Information Theory