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PRESS RELEASE - Business/Science/Engineering

Representatives from academic, industrial, and government research laboratories across the nation that lay the foundations for future generations of communications systems and a wide variety of electronic signal processing equipment convened this week at the Napa Valley Lodge in Yountville for the first workshop on exploitation of "cyclostationarity". This unusual term is a statistical property of random signals that reflects underlying cyclic behavior. Most manmade signals arising in communications, telemetry, radar, and sonar systems exhibit cyclostationarity, as do many signals of natural origin, including data arising in climatology, meteorology, astronomy, hydrology, oceanology, biomedicine, and economics.

The two-day workshop, attended by sixty-five participants mostly from the US, but also from Europe, was sponsored by the National Science Foundation, the Office of Naval Research, the Army Research Office, and the Air Force Office of Scientific Research. Some of the applications discussed include mobile cellular and indoor personal communications, forecasting with seasonal data, signals intelligence, and covert communications.

The workshop was organized by Professor William A. Gardner, who holds an appointment in the Department of Electrical and Computer Engineering at the University of California, Davis, and is President of the engineering consulting firm Statistical Signal Processing, Inc. in Yountville. Dr. Gardner is recognized worldwide as the leading authority on cyclostationarity, a subject to which he has made seminal contributions over the last two decades.

The University of California has several patents pending for Dr. Gardner's inventions in the area of wireless communications that are based on exploitation of cyclostationarity. The workshop predicted explosive growth in R & D activity and ultimately in new technology that exploits cyclostationarity for enhanced performance of future electronic systems.

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