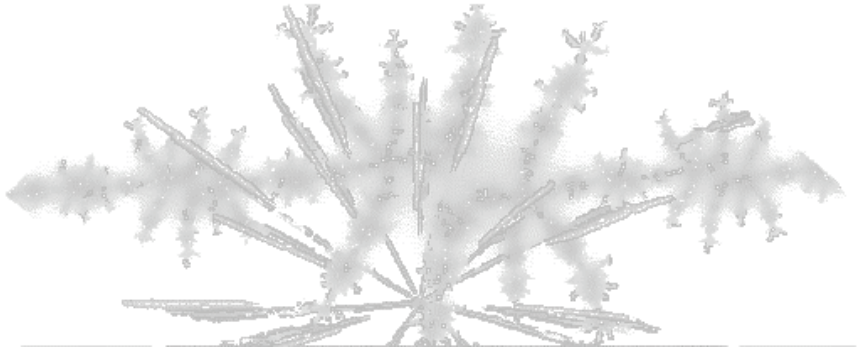

Manuscripts Accepted for Publication

Gomes, O. A. Model of animal spirits via sentiment spreading.

Guastello, S. J. The complexity of the psychological self and the principle of optimum variability.

Guastello, S. J. Physiological synchronization in a vigilance dual task.

Guastello, S. J., Reiter, K., & Malon, M. Estimating appropriate lag length for synchronizaed physiological time series: The electrodermal response.

Harrison, S. J., & Stergiou, N. Complex adaptive behavior in dexterous action.

Heath, R. A. Detecting nonlinearity and edge-of-chaos phenomena in ordinal data.

Katerndahl, D. A., Burge, S. K., Ferrer, R. L., Wood, R., & Becho, J. Modeling outcomes of partner violence using cusp catastrophe modeling.

Kiefer, A. W., & Myer, G. D. Training the antifragile athlete: A preliminary analysis of neuromuscular training effects on muscle activation dynamics.

Smit, E. H., & Derksen, J. J. L. The complexity of primary care in psychology: Theoretical foundations.

Vargas, B., Cuesta-Frau, D., Ruiz-Esteban, R., Cirugeda, E., Varela, M. What can biosignal entropy tell us about health and disease? Applications in some clinical fields.

Special Issue Scheduled for 2015: Optimum Variability

Thesis: It is now well known that healthy heart rate variability is chaotic and not rigidly oscillating. The principle of healthy variability has extended to other biomedical and psychological phenomena. What is the status of the research in any of the application areas? To elaborate further, some thought has been given to the idea that optimum variability results from a combination of the minimum entropy or free energy principle that pushes in a downward direction, and Ashby's Law of Requisite Variety that pushes in an upward direction. As a result, NDPLS would like to expand the scope of this particular topic into a special issue. Certain aspects of this topic area have been well subscribed already, and manuscripts by several author groups are in progress. Articles that we would like to add next are: (1) New empirical studies that expand our understanding of one or more applications of the optimum variability principle. The usual requirements for originality and rigor of data collection and analysis would apply. (2) Review studies that are specific to applications of the optimum variability principles in social psychology, abnormal psychology, organizational behavior, and economics. (3) Empirical studies in the areas of (2) above.

Special Issue Scheduled for 2016: Synchronized Behavior in Human Dyads, Teams, and Collectives

The synchronization of physical responses between people is a potentially important component of work team performance and other types of human interaction. This special issue examines constructs, methods, and relevant nonlinear dynamics that enlighten sync phenomena and their consequences. Synchronization (sync) in any type of system occurs when two or more oscillators have a feedback loop between them and a control parameter that adjusts the speed of interaction. The primary modalities of human sync that have been studied to date involve bodily movements, EEGs, and GSRs. The current outstanding issues are: How is it related to coordination in psychomotor, social, or work team contexts? How does loose coupling contrast psychologically with phase-locking across individuals? Does too much sync lead to maladaptive behavior? How many examples of sync exist in human society that have not been recognized as such? What are the most viable methods for studying sync? The contributions to the special issue examine the natures of the oscillators, feedback loops, and speed parameters. Methods to date have included symbolic approaches to synchronize behaviors found in body movement and EEGs, entropy metrics, phase analysis, recursion quantification, and nonlinear stochastic equation modeling. Substantive research to date has considered the connections between sync levels and the quality of interactions of dyads and teams, when sync enhances team coordination or has a negative influence, and when de-synchronization is needed to establish more viable interaction patterns.