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Wei Kang* (wkang@nps.edu), Department of Applied Mathematics, Naval Postgraduate School, Monterey, CA 93943. *On the Observability of Adversarial Swarm Dynamics.*

In this talk, I will introduce a quantitative measure of partial observability for dynamical systems. For networked systems such as swarms of unmanned vehicles, the concept and theory of partial observability are developed using a computational approach. The new approach solves some problems for which traditional observability analysis and estimation methods, such as Kalman filters, fail to address. The theory and numerical algorithms are illustrated using an example of detecting swarm cooperating strategy. (Received September 04, 2020)