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**Paul L. Goethals\*** ([paul.goethals@westpoint.edu](mailto:paul.goethals@westpoint.edu)), Department of Mathematical Sciences, United States Military Academy, West Point, NY 10996. *Threat Analytics: Establishing Measures for Security.*

The contemporary threats we observe come in a wide array of forms and purpose – external and internal, deliberate and accidental, benign and malignant, and with varying degrees of impact and complexity. The models used to evaluate security threats for analysis and interpretation in defense studies are just as diverse across many of the mathematical sub-fields and sciences. This presentation provides an illustration of the breath of threat analytics for security and defense while outlining the gaps or weaknesses in their formulation or measurement. Several new or emerging constructs for representation within the threat research space are highlighted. Finally, extensions and implications of this work are presented to give the audience an understanding of the nature and direction toward future threat analytics research. (Received August 04, 2020)