

# Networks and Practical Science Mapping

Kevin W. Boyack

Sandia National Laboratories

P.O. Box 5800, MS-0310

Albuquerque, NM 87185

+1 (505) 844-7556

kboyack@sandia.gov

## **ABSTRACT**

Network science researchers have often made use of literature data sets that formerly had been the province of those in scientometrics. Although scientometricians have not performed large-scale network studies on these data, they have nonetheless generated working networks and maps based on those networks. This talk will look at networks from the scientometrics and science mapping points of view. Specific topics to be discussed include data choices, the science mapping process, clustering and community structure, generating million node maps, validation of processes and community structures, science map characteristics, and science networks at different levels of aggregation.