

Center for Research in
Nutrition and Health Disparities
UNIVERSITY OF SOUTH CAROLINA

A Seminar Presented by:

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Numerical Data Standardization and Novel Cluster Analysis of Food Content using Mathematical Networks

We have developed a new standard for integrating numerical values with their units of measurement, numerical uncertainty, and defining metadata tags (www.metanumber.com & www.asg.sc.edu/metanumber). These new objects are called “MetaNumbers”. Our software manages all dimensional and error analysis as well as full computational tracing of metadata tags. Such metadata links are essential in every field: nutrition, pharmaceuticals, public health, banking, engineering, and science in general and specifically for automated data exchange among computers. We will discuss how networks can be created from tables of such metanumbers’ such as the nutritional content of foods, which in turn can be mined for information clustering. These clusters from the same or different tables can then be linked using attached metadata into a “supernetwork” that can span all numerical information leading to new areas of artificial intelligence.

Friday, April 29, 2016

2:00 PM – 3:00 PM

Discovery I, Room 140



Dr. Johnson's primary research interest is mathematical physics including quantum theory, relativity, and more recently network theory. His R&D team has been awarded over \$12M in external grants and contracts. Most recently he has designed and programmed a standardization for numerical information by attaching units of measurement, numerical uncertainty, unlimited metadata, and a unique reference name to numerical values thus allowing automated computer data exchange and new levels of artificial intelligence. He has now shown how tables of such “MetaNumber” objects such as a table of the nutritional content of foods can be converted into networks among rows (entities) and also among columns (properties) and can be analyzed for information clusters.

This is a free seminar and all faculty, staff, students, and guests are welcome to attend.

Contact Mary Wilson or Ranina Outing at nutrinfo@mailbox.sc.edu
or 803-777-6363 for more information <http://nutritioncenter.sph.sc.edu/>