

WICHITA STATE UNIVERSITY

Physics Seminar Presents Our Speaker:

Dr. Susan Ramlo

University of Akron, OH

“A Science of Subjectivity: A Physicist Reflects on Teaching, Learning, & Q Methodology”

Abstract: Q methodology [Q] is an 80-year-old mixed method developed by William Stephenson to scientifically study subjectivity. More specifically, Q offers an empirical method for studying subjectivity by revealing and describing the multiple divergent viewpoints that exist within a group of interest. In Q, a researcher collects statements about the topic, reduces their number in a way that preserves the communications, and then participants sort those statements into a grid that ranges from something like “most like my view” to “most unlike my view.” Q’s technique is the sorting of statements related to the topic and its method is the factor analyzing of those sorts to group people with similar viewpoints. Factor analysis in social science research has the same mathematical basis as the mathematics of quantum mechanics (QM). Yet, beyond the mathematical similarities, there are conceptual similarities between Q and QM. This becomes less surprising when we understand that Q’s creator had PhDs in both psychology and physics. Within this talk, I will introduce the audience to Q methodology and demonstrate how I have used this somewhat obscure mixed method to investigate and improve teaching and learning of physics.

Day & time:

Wednesday, April 10, 2019

2:00 p.m., 128 Jabara Hall

Refreshments & Discussion Afterwards

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