1145-49-389 **Jinlu Li*** (`jli@shawnee.edu`), Department of Mathematics, Shawnee State University, Portsmouth, OH 45662. *Fixed Point Theorems on Partially Ordered Banach Spaces and Their Applications.*

In this talk, we will present several fixed point theorems on partially ordered sets and on partially ordered Banach spaces. We will show that in these fixed point theorems, the considered mappings are not required to satisfy any continuity conditions but they satisfy some order monotonic conditions. Meanwhile, in these theorems, the order properties of the set of fixed points are also provided. Finally, we will present some applications of these fixed point results to game theory with incomplete utilities, ordered variational inequalities, ordered optimization problems, and integral equations. (Received September 05, 2018)