1145-VP-1448   **Hong-Jian Lai**, **Mingquan Zhan** and **Taoye Zhang*** (`tuz3@psu.edu`), Penn State Scranton, 120 Ridge View Dr, Dunmore, PA 18512, and **Ju Zhou**. *s-hamiltonian and s-hamiltonian connected line graphs of claw-free graphs.*

For an integer $s \geq 0$, a graph G is s-hamiltonian if for any vertex subset $S \subseteq V(G)$ with $|S| \leq s$, $G - S$ is hamiltonian; and G is s-hamiltonian-connected if for any vertex subset $S \subseteq V(G)$ with $|S| \leq s$, $G - S$ is hamiltonian-connected. Thomassen in 1984 conjectured that every 4-connected line graph is hamiltonian. Lai and Shao [J. GraphTheory, 74 (2013), 344-358] proved that for a connected graph G and an integer $s \geq 5$, the line graph $L(G)$ is s-hamiltonian if and only if $L(G)$ is $(s+2)$-connected. The results presented in this talk are:

(i). For an integer $s \geq 2$, the line graph $L(G)$ of a claw-free graph G is s-hamiltonian if and only if $L(G)$ is $(s+2)$-connected.

(ii). The line graph $L(G)$ of a claw-free graph G is 1-hamiltonian-connected if and only if $L(G)$ is 4-connected. (Received September 21, 2018)