1145-37-1089   **Sebastian Donoso** and **Wenbo Sun*** (`sun.1991@osu.edu`), 364 W Lane Ave Apt 315, Columbus, OH 43201. *Topological models characterizing multiple ergodic averages.*

Using ingredients from symbolic dynamics, Jewett proved that every measure preserving system has a strictly ergodic topological models in 1970's. After Jewett's result, the existence of topological models in various settings have been studied extensively. Recently, applications of topological models were found in the study of pointwise multiple averages. In this talk, I will talk about the development of topics on topological models, as well as their applications in ergodic theory. This is joint work with Sebastian Donoso. (Received September 18, 2018)