1145-35-1330 **Wonlyul Ko*** (`kowl@korea.ac.kr`), Institute of Basic Science, Korea university, 145 Anam-ro, Seongbuk-gu, Seoul, 02841, South Korea. *Asymptotic behavior of positive solutions to a diffusive predator-prey system with hunting cooperation in predators.*

In this talk, we introduce a diffusive predator-prey system with a functional response describing the situation in which predators work together when hunting. We study the effects of the partial vanishing of the non-negative predator-cooperation coefficient function in the predator-prey system. Moreover, we study the behavior of the positive steady states of the predator-prey system as the cooperation coefficient are small or large. (Received September 21, 2018)