



2019 천문우주과학과 세미나

**SEMINAR IN**  
**ASTRONOMY &**  
**SPACE SCIENCE**

**THURSDAY, 31 OCTOBER 2019**

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**Title : Applications of Machine Learning in  
Extragalactic Astronomy**

**16:00 PM, 천문우주과학과 기2111호(감민호홀)**

# ABSTRACT

Galaxies, galaxy groups, galaxy clusters, and Galaxy filaments are the main objects in extragalactic astronomy. Large optical surveys such as SDSS (Sloan Digital Sky Survey), DES (Dark Energy Survey), and 2dFGRS (Two degree Field Galaxy Redshift Survey) provide over  $10^6$  objects. Although computers process a large number of scientific analyses for extragalactic objects, some data are analyzed by human resources, such as morphological classifications of galaxies and grouping galaxies. Recently, large growths of machine learning algorithms are possible to deal with these topics since machine learning algorithms are specialized for classification, clustering and etc. In this seminar, I will introduce applications of machine learning in extragalactic astronomy, which are used in my recent works. Furthermore, I will also present some applications that I want to apply.