

[포IM-05] A Search for C IV emission-lines from Galactic SNRs with FIMS/SPEAR

Il-Joong Kim¹, Kyoung-Wook Min², Kwang-Il Seon¹, Jerry Edelman³

¹*Korea Astronomy and Space Science Institute (KASI),*

²*Korea Advanced Institute of Science and Technology (KAIST),*

³*University of California, Berkeley*

C IV $\lambda\lambda 1548, 1551$ lines are one of the most prominent emission lines in the FUV, which are expected to detect from supernova remnants. With the FIMS/SPEAR instrument, it has already been observed and analyzed about five large angular size supernova remnants (the Vela SNR, the Cygnus Loop, the Lupus Loop, the Monogem Ring, and the Antlia SNR). In this study, we searched for C IV emission lines from other smaller size Galactic supernova remnants with the same instrument, and found them newly for some targets. We also found some significant C IV emission line morphologies, which are clearly correlated with the X-ray, H α , or radio morphologies, for RCW 114, the Monoceros Loop, the Vela Jr. SNR, G65.3+5.7, G279.0+1.1, and G353.6-0.7. Additionally, while inspecting C IV emission morphology of the Vela Jr. SNR region, we found that the Vela is in direct contact with a H α ring feature like the Monogem Ring is in direct contact with the Gemini H α ring. We present the results of this searching and the early results of analyzing C IV emission line morphologies for newly C IV detected targets.

[포IM-06] FIMS 관측자료를 이용한 Large Magellanic Cloud 분석

최연주, 민경욱

한국과학기술원 물리학과

과학기술위성 1호 (STSAT-1)의 주탑재체 원자외선분광기 (FIMS, Farultraviolet IMaging Spectrograph; 또는 SPEAR)의 관측자료를 이용하여 Large Magellanic Cloud (LMC)대해 분석할 예정이다. LMC는 star formation이나 interstellar medium (ISM)을 연구하는데 적합한 천체로서, 원자외선(FUV) 영역을 통해 LMC내의 hot gas 분포를 연구할 수 있다. FIMS를 통해 얻은 이미지와 적외선을 비롯한 다른 파장 영역의 데이터를 이용한 관측 결과를 비교, 분석하면 새로운 결과를 얻을 수 있을 것이다.