Optical Properties of Wolf-Rayet Galaxy ESO 495-G21

Eon-Chang Sung, Hong-Kyu Moon
Korea Astronomy Observatory

Mun-Suk Chun
Yonsei University
Department of Astronomy and Atmospheric Science

We present new optical observations for Wolf-Rayet galaxy ESO 495-G21. Our data include broad-band *UBVRI* multicolor CCD images, narrow-band Hα CCD images, and two-dimensional high/low resolution long-slit CCD spectroscopy. Our optical surface photometry confirms that the radial luminosity distribution is well discribed by an exponential disk in all wavelenth domain, except the central 28″. We found a strong emission region of 25″ in radius. From optical CCD images, ESO 495-G21 appears to have a double core structure, and a low-surface-brightness elliptical envelope which is extended to the radius of 80″. The high resolution long-slit spectroscopy was carries out at several position angles. Our velocity field analysis shows that ESO 495-G21 seems to rotate like a solid body in the principal plane lying at the position angle of 145o. The maximum rotational velocity is about 50 km/sec at radius 25″.