

Ionized gas kinematics of void galaxies

Evgenia Egorova, Oleg Egorov, Alexei Moiseev

Evgenia Egorova (eshaldenkova@gmail.com)

Sternberg Astronomical Institute, Lomonosov Moscow State University, Russia

We compiled a sample of 16 void intermediate-luminosity galaxies that reveals unusual and perturbed appearance, and/or have relatively low metallicity for their luminosity in comparison with the standard relation. Our hypothesis is that such properties might be caused by the accretion of the external gas onto these galaxies or recent interactions and mergers. To examine this opportunity we use Fabry-Perot interferometer data in the $H\alpha$ emission line obtained with 6m SAO RAS telescope (Russia) and deep optical photometry performed with 2.5m telescope of SAI MSU (Russia). In most galaxies we indeed observe non-circular ionized gas motions that might be caused by accretion or tidal disturbance. Four isolated galaxies reveal strong misalignments between the optical major axis and the ionized gas rotational axis. Possible scenarios of such misalignments are discussed.