

Invited Lecture

OBSERVATIONS OF LARGE-SCALE IONIZING CONES IN SEYFERT GALAXIES

A. Moiseev

*Special Astrophysical Observatory, Russian Academy of Sciences,
Nizhnii Arkhyz 369167, Russia*

E-mail: moisav@sao.ru

Along with jet-induced outflows, ionizing cones give us one of the most powerful examples of the impact of active galactic nuclei on the interstellar and intergalactic medium at spatial scales from hundred parsecs to tens of kiloparsecs. We considered the results of observations of cone-like extended emission-line regions (EELRs) in Seyfert galaxies obtained at the Russian 2.5-m and 6-m telescopes using 3D and long-slit spectroscopic techniques. The observations aimed at the following main objectives: (i) Testing the predictions of the AGN unified model and constraining the central engine parameters. (ii) Probing the history of an AGN radiative output across the light-travel times to the external gaseous clouds. (iii) Studying the kinematics and origin of the off-plane gas illuminated by AGN. The contribution of Victor Afanasiev's works to our understanding of the EELR properties is also considered. (*The study was supported by the Russian Science Foundation, project No. 17-12-01335*).