http://doi.org/10.69646/14sbac35a

SPECTROSCOPY OF YOUNG SUPERNOVA REMNANTS WITH VLT/MUSE INSTRUMENT

SLADJANA KNEŽEVIĆ¹ ^(b), RINO BANDIERA², STEVE SCHULZE³, GIOVANNI MORLINO²

¹Astronomical Observatory of Belgrade, Volgina 7, 11060 Belgrade, Serbia ² INAF - Observatorio Astrofisico di Arcetri, Largo E. Fermi 5, I-50125 Firenze, Italy ³ Center for Interdisciplinary Exploration and Research in Astrophysics (CIERA), Northwestern University, 1800 Sherman Ave., Evanston, IL 60201, USA E-mail: sknezevic@aob.rs

The Multi Unit Spectroscopic Explorer (MUSE) instrument at the ESO Very Large Telescope has shown exceptional capability in observing and studying sources in the visible wavelength range. As a panoramic integral-field spectrograph, it covers a wide simultaneous spectral range. Its extensive field of view and high spatial resolution make it particularly well-suited for studying extended objects. The instrument's very high efficiency offers an unprecedented opportunity to study faint sources. In this report, we will present and compare MUSE observations of the supernova remnant 0509-67.5, spanning nearly an order of magnitude in observational time. Our findings indicate that even an hour of observation on this target can provide valuable constraints on the parameters used to determine the kinematics of shocks in young supernova remnants.