

STAR FORMATION IN NUCLEI OF EARLY-TYPE GALAXIES

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A far-UV population synthesis is performed with the IUE Spectral Atlas on absolute spectrophotometry for nuclei of early-type galaxies. Two types of stellar populations may be distinguished in gas-poor galaxies: a) the bulk of evolved stars mostly contributing in the 2000 Å - 3000 Å wavelength range as well as in the visible. The Long Wavelength Range IUE spectra appear to be excellent indicators of the turn off age in galaxy nuclei; b) a possible young massive star population which could be the origin of the far UV excess in most cases and which is essentially contributing in the 1200 Å - 2000 Å wavelength range. Spectral features of massive stars may be identified.

The sensitivity of such results to the gas content is also analyzed.

U-G AND G-R COLORS OF THE CLUMPY IRREGULAR GALAXIES MARKARIAN 297 AND 325

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ABSTRACT. U-G and G-R colors of clumps in Mrk 297 and Mrk 325 are presented. In addition, colors of other interesting objects and radiation sources were calculated for the Kiso UGR system. These objects are used to interpret the intrinsic characteristics of our sample. The observed colors of the clumps in both Mrk 297 and Mrk 325 are bluer than Im galaxies as well as main sequence stars and show scatter over the extent of the U-G vs. G-R diagram.

1. OBSERVATIONS

We present observational results of U-G, G-R colors of several clumps in Mrk 297 and Mrk 325. All plates for this work were obtained during a program to search for UV excess galaxies with the 105-cm Schmidt tele-