Everything you ever wanted to know about

The Ultraviolet Spectra of Star-forming Galaxies

but were afraid to ask.

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I. ABSTRACT

We present ultraviolet spectra of 143 star-forming galaxies of different morphological types and activity classes including S0, Sa, Sb, Sc, Sd, irregular, starburst, blue compact, blue compact dwarf, Liner, and Seyfert 2 galaxies. These IUE spectra cover the wavelength range from 1200 to 3200 Åand are taken in a large aperture ($10'' \times 20''$).

The ultraviolet spectral energy distributions are shown for a subset of the galaxies, ordered by spectral index, and separated by type for normal galaxies, Liners, starburst galaxies, blue compact (BCG) and blue compact dwarf (BCDG) galaxies, and Seyfert 2 galaxies. The ultraviolet spectra of Liners are, for the most part, indistinquishable from the spectra of normal galaxies. Starburst galaxies have a large range of ultraviolet slope, from blue ($F_\lambda \propto \lambda^{-1.85\pm0.06}$) to red ($F_\lambda \propto \lambda^{0.26\pm0.14}$). The star-forming galaxies which are the bluest in the optical (BCG and BCDG), also have the "bluest" average ultraviolet slope of $\beta = -1.75 \pm 0.63$. Seyfert 2 galaxies are the only galaxies in the sample that consistently have detectable UV emission lines.