

SOME MEASUREMENTS OF BLENDED SPECTRA

BY RALPH F. DELURY

IN any source of emission or absorption of light, the conditions of the systems, whose vibrations or oscillations account for spectrum lines, are so varied that the lines are never free from the effects of blending. Furthermore, in solar and astrophysical investigations the possibility of the blending of the radiations from several sources arises. Hence it is important that the effects of blending on the measurements of the lines be known. This point was raised by me several years ago,* and the method of blending known spectra in known ways and measuring the resulting lines was suggested as a necessary step in such investigations as the determination of the rate of rotation of eclipsing variables, the presence of a haze or halo of independently moving matter between the observer and the source of light, spectroscopic binaries, etc.; and some few measurements were given of solar rotation spectra blended with sky spectrum. The following measurements of plates taken in 1911 and 1912 and measured shortly afterwards, were made in accordance with those sugges-

* Report of the Chief Astronomer, 1911, p. 281-4.