The Energy Equilibrium of the Solar Chromosphere. J. B. Zirker, Sacramento Peak Observatory.—Athay and Thomas (1956) investigated theoretically the temperature structure of the solar chromosphere permitted by the requirements of energy equilibrium. They were able to apply their results in either of two extremes: either (a) under conditions of very high local opacity, when the net emission at the wavelength in question is zero, or (b) under conditions of very low local opacity when self-absorption can be neglected. Methods for the treatment of situations intermediate to these extremes have been developed since 1956. This paper presents one formulation of these methods and applies them to the solar chromosphere. Stable temperature intervals emerge below 10 000°K and around 60 000°K based, respectively, on hydrogen and ionized helium emission. The interval between 15 000°K and 40 000°K appears to be unstable.