

## **The chromosphere: structure and dynamics**

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### **Abstract**

The chromosphere is transparent to most of the radiation that is emitted in the photosphere and only a few spectral lines have sufficient opacity to sample this layer of the Sun: Ca II H&K, Ca II 8542, Mg II h&k, H $\alpha$ , He I 10830. In the chromosphere magnetic pressure equals or surpasses gas pressure, giving rise to a complex force balance that is responsible for the very fine structuring of the chromosphere and that gives rise to very intricate motions and jets. Most chromospheric lines form under non-LTE conditions which makes it very challenging to derive the physical state of the chromospheric plasma from the observed intensities. In this talk I will review spectral lines and techniques that can be used to derive meaningful physical parameters from chromospheric observations, with special focus in active regions.