
1983년도 學術大會 發表 論文抄錄

다음은 한국 천문학회 1983년도 춘계 및 추계 학술 대회에서 발표되었던 총 20편의 논문 초록을 그 발표 순으로 실은 것입니다.

春季 學術大會

일시 : 1983年 4月 30日

장소 : 國立天文臺

<研究論文>

The Structure of Accretion Disk in Dwarf Nova

Kim, Kyung Mee & Choi, Kyu Hong

Yonsei University

The structure of the accretion disk in dwarf nova was studied. For given $Z/R=0.005$ and 0.01 , we have calculated static models of the vertical structure at the radius where the temperature has its maximum value. The results of calculation will be presented.

Thermal Structure over SPO 6403

Kim, Hyun Goo & Yun, Hong Sik

Seoul National University

We made use of the observational materials obtained from high resolution spectra made over a sunspot (SPO 6403) with the Echelle spectrograph at Sacramento Peak Observatory by Beebe and Yun. The observed profiles of C_2 5150.56, CN 3864.32, MgH 5150.20 and FeI 5150.84 lines, representing the disk center, the penumbra, the penumbra-umbra boundary and the umbra are reduced. We calculated the synthetic spectra of these lines by using LTE line formation theory. Then we fitted the calculated synthetic profiles to the observations by varying the values of the oscillator strength and the damping constant. The best fit was finally obtained by means of iterations. The resulting model representing the umbra and the penumbra of the sunspot (SPO 6403) are presented.

Finally, we discuss a possible mechanism responsible for the weakening of our observed MgH line, which appears to corroborate the presence of lateral influx of the photospheric background radiation inside sunspots.