We present elemental abundances of 12 red giants obtained with the BOAO 1.8m telescope and its fiber-fed echelle spectrograph. We perform the abundance analysis using the Kurucz model atmosphere and MOOG. Comparisons of our alpha- and neutron-capture elemental abundances and those in globular clusters and nearby dwarf galaxies will be presented.

[V-1-4] Galactic Warps in Live Triaxial Halos

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We investigate the evolution of the initially tilted, self-gravitating disks in a live axisymmetric or triaxial halo. Our study shows how the axisymmetric and triaxiaility of the halo alters the evolution of the warp compared to the spherical case. We attribute the development of warps to the torque between a halo and disk and that between the inner and outer regions of the disk. We discuss if the triaxial halo can be responsible for the formation and maintenance of the warp phenomena even in the presence of dynamical friction between the disk and the halo.

[V-1-5] Introduction of the CFIRB Observations with AKARI/FIS

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The Cosmic Far-Infrared Background (CFIRB) contains information about the number and distribution of contributing sources and thus gives us an important key to understand the evolution of galaxies. In order to detect CFIRB fluctuation effectively, we have to analyze the confusion carefully which sets a fundamental limit to the deep observations. From our deep observations, we can compare the background fluctuation via observations of regions at different Galactic latitudes. Our comparative study between estimated confusion levels from our observations and those from our model enables us to understand the nature of CFIRB. We introduce our CFIRB observations and report the preliminary results.

■ Session VI-1 : Space Environment 2
Thursday, 23 October [11:25-12:25]

[VI-1-1] Statistical study of phase reversal locations on the SC-associated preliminary impulse

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In this study, we investigate the magnetic latitude of phase reversal on the sudden commencement (SC)-associated preliminary impulse with 267 SC events using the ground magnetometer data of the IMAGE from 1997 to 2005. During SC event, geomagnetic fields are affected by various currents flowing in the magnetosphere and/or ionosphere. In particular, high-latitude geomagnetic field variations are significantly dominated by the change of SC-associated field aligned current (FAC). Until now, however, there are few studies to examine where the location of the FAC in the ionosphere is and what determines the location of the FAC. The location of the SC-associated FAC can be examined by using magnetometer data obtained from high-latitude stations distributed along the same magnetic meridian. The phase reversal locations are concentrated two regions, ~62 deg (L ~ 4.5) and ~70 deg (L ~ 8.5) in magnetic latitude. If FAC is a result of a mode conversion from fast mode to Alfven mode, then the FAC location could be determine by the duration time of the input energy. When we use the rise time, dT, as the input energy, there is no relationship between dT and the location where the first pulse of SC is reversed. We consider other factors such as local time and solar wind condition.

[VI-1-2] The temporal variability of the longitudinal plasma density structure in the low-latitude F -region.

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Formation of longitudinally wave-like plasma density structure in the low-latitude F region is now a well-known phenomenon from the extensive studies in recent years. Observations of plasma density from multiple satellites have shown that the locations of the crests of the plasma density that are seen to be stationary during daytime are shifted after sunset. This phenomenon has been understood to be caused by eastward drift of the ionosphere at night. However, the eastward drift velocity of the ionosphere after sunset is not sufficiently large enough to explain the day-night difference in the longitudinal density structure. The