

INTRODUCTORY TALK: AIM OF THE SYMPOSIUM

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The idea to organize a Conference on high S/N spectroscopy came to me several years ago, in the beginning of the eighties, when the first tracings of Reticon spectra of 8 and 9 magnitude stars were published. I suddenly realized that the quality of those spectra was comparable to those we find in the atlases of the Sun, Procyon, Arcturus and of a very few other very bright stars. I thought at that epoch, probably at the top of Mauna Kea, that when high-resolution spectroscopists will have collected enough high S/N results, then, time would be ripe to discuss the impact of these results on our knowledge of Stellar Physics.

The time is now ripe, and here we are with our collected material opening this 132 IAU Symposium. The material is so vast, that I fear, that many of us will be afraid that we will not have time to discuss all the items contained in the program.

This program is centered along two main axes. The first one concerns some important advances in a better understanding of the physical structure of the stars in the light of new results of high S/N spectroscopy. The second one deals with the interpretation of the chemical composition of stars belonging to different populations and to... different galaxies (for the time being belonging to our Galaxy and to the Magellanic Clouds).

These two main topics are preceded by short sessions on spectrographs detectors, Fourier transform spectroscopy and radial velocity measurements, in the aim to give us the necessary background for a better understanding of high S/N observations. They are followed by a session in which abundance constraints on stellar evolution, nucleosynthesis and cosmological theories will be very briefly discussed.

A week ago in the "Liège Conference" spectrographs and detectors have been discussed much more in detail, and during this week the most remote objects will be on the grill at a Conference of the Institut d'Astrophysique de Paris.

Another point of interest of this meeting is that, at my knowledge, it is the first time that almost all the teams interested in lithium abundance in stars will gather together. Unhappily, our dear friend George Herzog, who was the first to discover the large variation of Lithium in F and G stars, was not able to attend the Conference.

Poul Erik Nissen will conclude the Conference and will have the hard task to be the most present person in the conference-room during this week.