BBN and WMAP values of the baryon density is not solved. The use of Be as a cosmochronometer for the early Galaxy has been successfully tested, and it has been shown that the observation of fragile elements is crucial to understanding globular cluster formation. New Li and Be observations have also been carried out in a variety of open clusters; models of pre-main sequence Li depletion still do not match observed patterns for solar-type stars, while a very good consistency is obtained for very low mass stars. The use of the lithium depletion boundary as an alternative and secure age indicator for young clusters has been stressed. The low level of Li in the Sun, one of the strongest factors of evidence for the existence of a non-standard mixing process on the main sequence (MS), remains unexplained and the depletion mechanism is still elusive. Whereas a few stars in old clusters share the low Li content of the Sun, the majority of solar-type stars intriguingly level out their Li content at an abundance of about a factor of 10 higher than solar. Finally, it has also been shown that planet-host stars, which are statistically more metal-rich than stars without planets, do not differ from the latter as far as the light elements are concerned. These results argue against pollution from planetary material as the key process leading to an overall metallicity excess, since in case of pollution an enhancement in Li and Be should also be observed.

A general word of caution is appropriate: whilst the 1D treatment of stellar atmospheres is fairly primitive, most recent solar abundances retrieved with the 3D treatment show a large discrepancy between several chemical element abundances in the Sun, oxygen in particular, and the independent constraints from helioseismology.

In summary, from the observational point of view, we now have clear observational evidence of internal extra-mixing processes (i.e., mixing mechanisms not predicted by standard stellar theories) both during the MS and even more for stars evolved off the MS. Differences of abundances in key elements are observed in massive stars in the Galaxy and in the Magellanic Clouds at different evolutionary stages, and CNO cycled material and isotope ratios show the presence of deep mixing among bright RGB stars. The mixing mechanisms are most likely related to stellar rotation, which is relevant for both hot, rapidly rotating stars and for lower-mass, more slowly rotating stars. It is worth noting that, whilst extra-mixing does not seem to affect red giant evolution, it has very important implications for different issues (e.g., Galactic evolution of ^{3}He). As far as massive stars are concerned, rotating models and mixing have important consequences for chemical yields and thus Galactic enrichment. We would like to stress that, perhaps for the first time, in addition to a large body of observations that provide abundances for several elements, for stars in a variety of evolutionary stages and environments, appropriate models are now available. By using fairly general treatments it is possible to reproduce quantitatively the behavior of observed chemical patterns for stars in a large range of masses.

Finally, models of Galactic evolution of Li and Be still have problems in reproducing the observed patterns, in particular the plateau at low metallicities. Galactic evolution models for heavier elements in our Galaxy and in its dwarf satellites have been presented. Whereas [α/Fe] ratios in dwarf spheroidals seem rather well reproduced, the evolution of elements such as N and C is less well constrained and appears critically dependant upon stellar evolutionary models and stellar yields. Nitrogen, for example, is overproduced in dwarf irregular galaxies.

Several of these aspects, including the bright future of these investigations, in particular with the advent of Gaia, were emphasized in the two summary talks.

A successful workshop benefits from the work of many. In addition to all the participants, special thanks go to the SOC and the whole LOC (C. Travaglio, E. Masini, D. Galli, P. Sestito, P. Bristow, G. Pace, C. Stoffer). Their excellent work made our stay not only interesting, but also pleasant.

ALMA Community Day

T. L. Wilson (ESO) and E. F. van Dishoeck (Leiden Observatory)

A major event has been the ALMA Community Day, held at ESO Garching 2004 September 24. This event was sponsored by ESO and RADIONET. There were more than 130 participants. Most of the members of the European Science Advisory Committee (ESAC) of ALMA actively participated in the organization of the Workshop and most were able to attend. The morning session opened with a greeting by the Director General. Then there was a review of the project by the Joint ALMA Office Director Massimo Tarenghi. This was followed by a series of 5 longer science samplers and 6 shorter presentations on topics relevant to ALMA. There was emphasis on how ALMA could further progress in these areas. After the lunch break there were 4 longer talks about plans for ALMA computing (from the users point of view), early science observing, and two talks on the ESO plans for the ALMA Regional Center (ARC) in terms of user support and science support. The meeting ended with a one hour discussion involving all of the participants. The Community Day agenda and presentations have been collected and are to be found on the website: http://www.eso.org/projects/alma/meetings/gar-sep04/. It was felt that there should be another, perhaps longer, Community Day meeting in about one year's time.

Within ESAC (for the current membership see http://www.eso.org/projects/alma/newsletter/almanews2/), there are plans for future meetings. Among the topics proposed are the SZ effect, for a meeting in Paris, spectral line searches with an emphasis on molecules of biological interest, for a meeting in Denmark, and modeling of sources at a workshop in Sweden. In conjunction with North America, there are plans for the next global ALMA Science meeting, to be held in Madrid in 2006.