



## Address by CATHERINE CESARSKY, Director General of ESO

**T**HIS IS A GREAT DAY FOR ASTRONOMY. This is indeed a great day for Chile, for the II Region and for San Pedro de Atacama. And this is indeed a great day for all of us, a moment to which we have all been looking forward with great anticipations. This is the real beginning of a joint adventure. We will be reaching towards the stars, searching for the earliest, remotest objects in the Universe, peering beyond current horizons into the deep unknown.

Here, on Chilean soil, in the great emptiness of the Atacama desert and closer to the sky than ground-based astronomers have ever been, we are now embarking upon an ambitious exploration of new and unknown celestial territories. We do so in the service of science and society, ultimately for the benefit of humanity.

There have been astronomers in Chile since long, but it was only in the early 1960s that the true potential for our science of this wonderful country with its pure atmosphere and clear skies was understood by scientists from North America and Europe. Already in those early days, people from ESO and AURA discussed opportunities to collaborate closer in their efforts to establish new and powerful observatories in the IV Region. However, time was not yet ready for such joint ventures and our predecessors in the end decided to set up separate facilities at La Silla and Cerro Tololo.

ESO signed the first agreement with Chile, exactly forty years ago today. Meanwhile, more observatories have been created in Chile, and in parallel Chilean science and technology has developed enormously. We have all benefited from increasingly closer collaboration and many young Chilean astronomers and engineers are now working at these observatories, also at La Silla and Paranal.

ALMA is the pinnacle of this long and steady development in which so many partners have come together to realize what is the first truly global astronomical project. Joining their considerable forces, the power and experience of dedicated specialists on three continents are now striving to open a new, unique window towards the Universe which will allow us to explore vistas which have been completely hidden from view until now. We are convinced that Chajnantor is the best possible site for this new instrument, a unique site which provides the ALMA telescopes with optimal conditions for sensitive, prolonged series of complex observations.

We are together today to celebrate the beginnings of a great project. We are gathering here in a beautiful and, for many of us, very remote region in which unspoiled nature will soon meet the high-

est technology available on this planet. We have come here to construct a unique instrument in these pristine surroundings, well aware that this vast country has a long historical and cultural tradition of ancient peoples. Peoples who have asked the same fundamental questions about the Universe and man's place in it, as we now do. While the incentives and the search remain the same, we may come closer to the answers with ALMA.

The Chajnantor plateau is a serene site where man can be alone with his thoughts. It is in many ways one of the most extreme places on this planet and nobody who has been up there remains unmoved. Once I thought of the distant past, imagining a small group of ancient, daring travelers crossing that plain in front of me, melting into the stark landscape. They would watch the night fall, the stars appearing in a darkening sky, marveling at the incredible beauty of the majestic panorama above. Would it ever have occurred to them that on this very site, hundreds of years later, a forest of giant structures would be built to collect those cryptic signals from above – messages from the depths of space with information about the beginnings of that mysterious Universe in which they – and we – live? Or would they ever imagine that people from many other societies and from other continents would sometime assemble here, working together in their quest to unravel our distant origins?

ALMA is indeed a unique project, both in terms of science, technology, operation, management. In addition this project possesses a great number of aspects that fascinate young people and it provides a fantastic opportunity to create an inviting path towards modern science, with excitement and learning going hand in hand.

Why is this so? Why has ALMA this great appeal? There is first of all the Chajnantor site itself, its remoteness, the high

altitude, the desert, the volcanoes, the population in this area, the ancient peoples with their unique culture, their history. There is the challenge of high technology, the joining of so many antennas and the almost magical possibility to combine the signals so that at the end a radio image of unequalled penetration and sharpness is obtained. And then there is of course the marvelous science which ALMA will do, all the way from nearby stars with exoplanets in the making to complex interstellar molecules and onwards to the earliest and most remote galaxies.

I sense that soon the word ALMA may also become equivalent to excitement, exploration of the unknown and, not least, exemplary international collaboration. People will proudly declare that they are part of this project. Let us rejoice that we have come this far! And let us now together tackle the next crucial phase with determination. Now we begin the construction of this great facility in this exceptional place.

I would like to read to you the message received today from Norio Kaifu, Director of the National Astronomical Observatory of Japan: "Congratulations for the wonderful start of the ALMA construction. Breaking the ground, flying over the Andes, the ALMA will visit a number of marvelous new worlds in the Universe where the humankind could never reach before it. We sincerely wish safe and successful construction on the Atacama site. And, the third condor is ready to fly join you!"

I express my gratitude to all those people, in Europe, in North America and in Chile, who have helped us to reach this crucial milestone. We know that the way ahead is still long and that there will be problems. Together we shall solve them and in not too many years we will then begin to reap the fruits of this hard labour. Muchas gracias.



With the Director General in this photograph, are (left to right) Robert Dickman (NSF), Eduardo Hardy (NRAO), Fred Lo (NRAO), Massimo Tarenghi (ALMA) and Daniel Hofstadt (ESO).