

Professor Lodewijk Woltjer passed away on 25 August 2019

Lodewijk Woltjer, known to many as Lo, was born on 26 April 1930 in Noordwijk, the Netherlands, as the son of astronomer Jan Woltjer. He studied at Leiden University, and carried out his doctoral research under Jan Oort. He obtained his cum laude doctorate in 1957, for a PhD thesis on the magnetic field structure of the Crab Nebula. Following his PhD, Woltjer continued to do research in theoretical astrophysics and plasma physics — studying quasars, supernova remnants and magnetic fields in stars and galaxies. He held postdoctoral research appointments at Yerkes Observatory and at Princeton University, and then returned to Leiden University in 1959 as lecturer of astronomy. He was promoted to professor of theoretical astrophysics and plasma physics two years later, holding the position until 1964. Between 1964 and 1974 Woltjer worked at Columbia University in New York, first as the Chair of the Astronomy Department and subsequently as Rutherford Professor of Astronomy.

Woltjer returned to Europe at the instigation of Adriaan Blaauw, then ESO's DG, who asked him to set up a science group. He succeeded Blaauw, created the science group, and became ESO's third and longest-serving Director General, from 1975 to 1987. In this period Woltjer oversaw the crucial change from an organization that had achieved its original goal and delivered the 3.6m telescope on La Silla to the multi-programme organization it is today. He decided that the next step should be a facility with four 8m telescopes (rather than 16 4m telescopes, or one 16m telescope), with the possibility of using them together as an interferometer built into this system from the start. He managed to convince the ESO Member States to double their annual contributions to make this Very Large Telescope a reality. He stepped down when he had secured the unanimous approval by the Member States for the VLT project, and the funding had been guaranteed, stating that 'now someone else can build it'. He had already provided strong arguments that Paranal would be an excellent site. This singular achievement was pivotal in ESO's development, and its rise to prominence in world astronomy, and is described in his own book *Europe's Quest for the Universe*, and, more recently, in Claus Madsen's book *The Jewel on the Mountain Top*.

Early in his tenure at ESO, Woltjer selected Garching as the new location of the ESO Headquarters, organized its construction, and oversaw its inauguration in 1981. He convinced Italy and Switzerland to join ESO in 1982. This enabled the construction of the New Technology Telescope, which was a crucial precursor of the Very Large Telescope. He also brought the 15m SEST radio antenna to La Silla. It was the first submillimeter telescope in the southern hemisphere, and paved the way for ESO's further involvement in APEX and in ALMA, both on Chajnantor, a site which Woltjer already visited while he was at ESO. He also strengthened ESO's relationships with other organisations, including signing the agreement with the European Space Agency for the Space Telescope European Coordinating Facility, which was set up at ESO Garching, to enable European astronomers to make optimal use of what would become the Hubble Space Telescope.

Following his time at ESO, Woltjer remained active in astronomy, working at the Observatories at Arcetri and at Haute-Provence. He was the founding President of the European Astronomical Society, serving from 1990-1993, and was President of the International Astronomical Union from 1994 to 1997. He had a key role in the development of ESA's Horizon 2000 plans, working closely with Roger Bonnet, ESA' Director for Science. A decade later, the two of them wrote a thought-provoking book, entitled *Surviving the next 1000 Centuries*.

Over the years, Woltjer kept his connections with Chile and ESO, participating in the 50th anniversary gala dinner in Munich in 2012, attending the ALMA inauguration in 2013, visiting the observatories in Chile on several occasions and, as recently as 2017, at the age of 87, attending the First Stone ceremony for the Extremely Large Telescope, and visiting the by now extended Headquarters in Garching for the *Reaching New Heights in Astronomy* meeting.

Lo Woltjer was often accompanied by his wife, Ulla Demierre, who worked with him from the time when he was ESO DG. Ulla preceded him earlier this year, after a short illness. They will both be missed.

Tim de Zeeuw, 27 August 2019