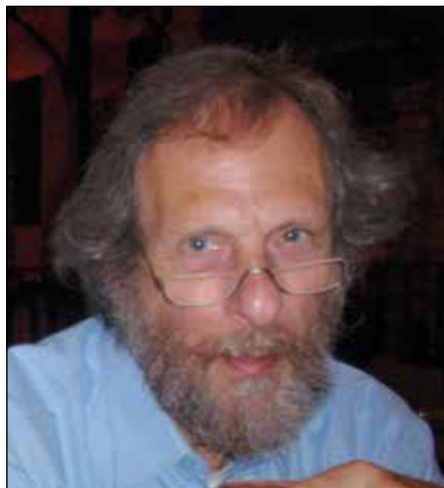


Obituary: James ('Jim') Caplan (1942-2020)



Jim was born in Chicago in 1942. At age twelve a local newspaper was reporting his wish to make a career in astronomy. Eighteen months later another report revealed his nascent talent for instrumentation. He was one of a trio polishing, Foucault-testing and selling 10-inch telescope mirrors.

Jim completed his doctoral research at Dearborn Observatory (Northwestern University) in 1970. It involved building a pressure-scanned échelle and Fabry-Perot spectrophotometer which he used to observe the red Balmer line in cool stars. This Fabry-Perot experience brought him to Marseilles, first to the Laboratoire d'Astronomie Spatiale (LAS), which was a 1960s offshoot from the Observatoire de Marseille (OM), and soon to the OM itself for the rest of his career. We can see a certain historical appropriateness to this transatlantic shift because it was in Marseilles that Perot & Fabry developed their interferometer based on parallel, highly-reflective plane plates, which in the years just prior to World War I was used with the OM's 80-cm Foucault telescope for observations of emission lines in the Orion Nebula. Jim's astrophysical research centred on building spectrophotometers incorporating Fabry-Perot étalons and using them for studies of ionised gas, dust absorption and star formation in the Galaxy and the Magellanic Clouds. Lise Deharveng was a close collaborator in this work.

From about 1990, Jim's interests widened to include the history of astronomy in Marseilles. He was an assiduous participant in the meetings that led to the decision to make a national inventory of historical observatory artefacts, with Marseilles as one of the first, trial sites, chosen in part because of the Observatory's rich heritage dating back to its foundation under Louis XIV. With the late Marie-Louise Prévot and other colleagues, he assembled ancient instruments, portraits, engravings, photographs and the like into an enlarged museum on the ground floor of the Maison des Astronomes, the main surviving

building from the OM's 1860s move to the Plateau Longchamp in order to accommodate Foucault's telescope. The resulting inventory was incorporated into the Culture Ministry's website www.pop.culture.gouv.fr/.

All this work underpinned the three-day symposium held in 2002 to celebrate the OM's tercentenary, which Jim organised. Rediscovered archives were classified and inventoried by the Bouches-du-Rhône departmental archives. Jim welcomed many external researchers to these records, which for a while could be consulted in scanned form on the now-defunct Centre de Conservation du Livre's e-corpus website.

In addition instruments were restored or re-assembled under his impetus, such as the Eichens Meridian Circle (1876) with its 3½-m tube and metre-diameter measuring circles. Jim commented 'I would describe the meridian circle as more than a simple scientific instrument—it was a scientist's instrument. ... [Its] adjustments ... had to be monitored constantly ... the meridian circle was continually put on trial...' Historic instruments were not just attractive artefacts. Jim was deeply interested in their construction and in-use performance.

Jim's conservation work was hindered by the (re-)merger of LAS and the OM in 2008 to form the Laboratoire d'Astrophysique de Marseille, in overall smaller premises further removed from the city centre at Château-Gombert. The allocation of the Maison des Astronomes to a new, non-astronomical entity and the influx of instruments and archives from LAS meant that almost everything had to be put in storage. Nevertheless, some prized items were presented in 2009 in the 'Telescopium' exhibition in the nearby Natural History Museum. Jim was principal organiser. A pedagogue at heart, he chose the Latin title Telescopium 'to stress the fact that reflectors

and refractors are just different ways of accomplishing the same thing.' He found this unity is often lost on French-speakers because the language has no generic term, only the distinct *télescope* and *lunette*. He retired the following year and was appointed emeritus, which allowed him to continue his work. One of his projects was cataloguing and dating the OM's measuring engines for photographic plates, which were key observatory items before the development of electronic detectors.

Jim was a perfectionist ('I had no wish to do a bad job', he wrote in an e-mail). Much of his published historical work appears in the proceedings of the many symposia he attended (Fig. 1). As he was starting chemotherapy, he was hoping to present something concerning 'home-made' observatory instruments at the next meeting of the Scientific Instrument Commission. He was extremely generous with his time, exploring the Marseilles archives and instruments for others' projects, and contributing frequently and knowledgeably to the RETE, Antique Telescope Society and HASTRO-L email lists. His quiet and friendly personality and sense of humour were greatly appreciated, as reflected by numerous tributes on these forums following his death. We miss him greatly.

James Gerald Caplan, born 1942 March 5 in Chicago, died 2020 May 8 in Marseilles. B.S. (Physics), University of Chicago, 1962. M.S., Ph.D. (Astronomy), Northwestern University, 1965, 1970. Doctorat d'État, Université de Provence, 1984. First joined the Scientific Instrument Society in 1999. Other memberships included the International Astronomical Union, the Scientific Instrument Commission and the Antique Telescope Society. Married (i) Janice Klepich, (ii) (†) Janine Lombard. Survived by a son, Roger, and two grandsons, Noah and Elias.

William Tobin & Françoise Le Guet Tully



Fig. 1 Taken at the Hevelius Quadricentennial Conference, 15–18 September 2011, Gdańsk, Poland.