

# Astronomical discovery made in India in 1689

BANGALORE, March 24. (PTI)

Even as Indian astronomers are busy in a rendezvous with the Comet Halley in the 200th year of modern optical observations in the country, new light on early observations shows that an important astronomical discovery was made from the Indian soil in as early as 1689.

Father Richaud, who used a telescope for the first time from the Indian soil, 80 years after it was discovered by Galileo, made important astronomical discoveries using a 12-foot telescope at Pondicherry.

The most important discovery made by the Father was that of the double star, Alpha Centauri, in the southern skies, which is inaccessible to the observers in the north. Alpha Centauri was the second double star to be discovered, the first being, Alpha Centauris discovered by Father Fontery at the Cape of Good Hope in 1685.

**FIRST ASTRONOMER:** According to researchers at the Indian Institute of Astrophysics (IIA) here, the seat of modern optical astronomy in the country, Father Richaud is also credited to be the first astronomer to observe the comet of 1689 December. He had reported his comet observations in the "memoirs of the Royal Academy of Sciences of Paris."

The researchers. N. Kameshwara

Rao, A. Wagiswari and Christina Louis, say that the Comet observations enabled Father Richaud to discover the double star Alpha Centauri, which later became a favourite object of many astronomers of the Madras observatory since its inception in 1792.

Among other important stellar observations made by the French-born Father, who spent a few years in Siam also, included determination of latitude and longitude of Pondicherry and San Thome, observations of the zodiacal light and discovery of dark clouds near Coalsack.

On April 4, 1689, a lunar eclipse occurred exactly at the time indicated by the Father and a large number of French and Indians came to watch it.

Father Richaud had determined the latitude of Pondicherry as 11 degree 53', which is very close to the currently accepted 11 degree 56'. Similarly, he fixed the latitude of San Thome, which he described as a famous city of India in the memoirs, at 13 deg 10', very close to the present value of 13 deg. 9'.

**ASTRONOMY AS SUBJECT:** Quoting records available at the archives of the Jesuits at Paris, the researchers say that the Father was not only interested in practical work, but

also taught astronomy at a new school opened by Jesuits at San Thome.

The researchers say that the Saint, who combined scientific culture with his religious beliefs, finally died on April 2, 1693 while still in Pondicherry. This has been established by the evidence provided by the letters written from Pondicherry by his fellow priests. These unpublished letters have been preserved at the Archives of the Foreign Missions in Paris.

However, they say that their efforts to locate the Father's grave had not been successful, since it is believed to have been destroyed during war with the Dutch. "We are still trying to get more information regarding Father Richaud's stay at Pondicherry and San Thome, Mylapore and hope to get some records of his work in India from these two places."

The IIA Director, Prof J.C. Bhat-tacharya says that after the early astronomical observations made by Father Richaud, there was a gap in scientific studies and systematic observations started again only in 1786, when William Petrie, an officer of the East India Company set up a private observatory at Madras. Since then astronomers in India have had several milestones to their credit.