
Obituary

Dr Antoni Przybylski

Dr Antoni Przybylski, a staff member of Mt Stromlo Observatory for 28 years, died suddenly in Queanbeyan on September 21. A deeply committed astronomer, he possessed two unusual distinctions: his PhD was the first degree to be awarded by ANU, and he was a member of the very small and select group of astronomers who have had stars named after them.

He was born in Rogozno, Poland, in 1913, and attended the University of Poznan, where he gained his first degrees and became a Research Assistant of the University Observatory. When the war broke out he served as an artillery officer at the defence of Warsaw. Taken prisoner by the Germans, he was sent to a PoW camp in Mecklenberg in West Germany, but in 1941 he effected an escape and returned to his parents' home in Poland. The risk of arrest by the Gestapo was great, and he decided to make for Switzerland. He had to cross wartime Germany from one end to the other, but by travelling mostly at night, and aided by some narrow escapes, he at length reached the border, entering Switzerland at his second attempt. Along with many other Poles he was interned, but he gave lectures in camp, and could study at the Zurich Polytechnic. He emerged from that institution in 1949 as a Doctor in Technical Sciences, with a thesis on a chemical subject.

The war over, Przybylski was unwilling to return to a communist-dominated Poland, and decided to emigrate to Australia, where he arrived in 1950. As was the practice at the time, he was under a two-year bond, in his case to the PMG's Department. He was digging trenches for cables when a friendly Departmental officer brought his credentials to the notice of Dr Richard Woolley, then Director of the Observatory. Woolley gave him a position, then a scholarship, and supervised the thesis for which he obtained his PhD in 1954. The thesis was concerned with the effects of convection in stellar atmospheres.

On the day Przybylski arrived he was introduced around the Observatory. When the workshop staff heard his name there was a pause, following which someone said all those consonants were a bit much, and they were going to call him 'Bill Smith'. This was abbreviated to 'Bill', by which name he was known for the rest of his life, particularly on Stromlo.

In 1957 Woolley was succeeded as Director by Bart Bok, and with Bok's persuasion Przybylski took up observing. His programme was spectroscopic and photometric observations of subdwarfs and high velocity stars. Plenty of peculiar objects could have been expected among these, but never anything as peculiar as the one he hit upon in 1960, now known as Przybylski's star. This of course is HD 101 065, a 9th magnitude Ap star, certainly the most extreme of the Ap stars, and widely regarded as the most peculiar star known. In this star the iron peak elements are underabundant by orders of magnitude; instead its atmosphere is dominated by lanthanides, and especially by the rare earth holmium, not yet found in any other heavenly body, not even the Sun, and difficult enough to study on Earth. This star has so far defied rational explanation, and seems likely to remain an enigma for years to come.

Przybylski contributed of course to other branches of astronomy. He did some of the very first work on satellite orbits, found other most interesting stars, like ν Indi, and was the undoubted pioneer in studying the compositions of individual supergiants in the Magellanic Clouds. This last was possibly his most important contribution. He was co-discoverer of the Swihart-Przybylski variational method of constructing stellar atmospheres, did some influential early work on blanketing theory, and was a diligent and effective observer of comets and variable stars (he discovered the variability of HD 16456, almost the brightest c-type RR Lyrae known). In all he published more than fifty papers.

He never married, living after retirement in John XXIII College, ANU. In 1984 he was awarded a second BSc, this time in the natural sciences – botany, zoology and geology. He took a full part in the life of the College, tutored the undergraduates in mathematics and physics, and one felt lived out his last years very happily.

Przybylski was a warm-hearted, generous man without an ounce of malice, deeply religious, though not obtrusively so, and Polish to the core. His friends will remember with affection little idiosyncrasies of speech and manner. Thus, failing to move a large rock in a plot he was digging – 'It is fastened to the underground'. Or describing, with satisfaction, his driving test – 'You've passed' said the inspector 'I wouldn't go through that again for a fortune'.

He was a staunch supporter of the Catholic Church and a highly respected member of the Polish community in Canberra, where he made in particular an outstanding contribution to the Polish Ex-Servicemen's Association. He will be remembered too for his most generous support of many educational and charitable organisations both in Australia and abroad.

S. C. B. Gascoigne