

Eberhart Jensen 1922–2003

Fellow of the RAS, leading Norwegian astrophysicist.

Eberhart Jensen, a leading Norwegian astrophysicist, died in Bærum outside Oslo at the age of 80 on 16 January 2003. Eberhart was the foremost of a number of young astrophysicists, all students of Svein Rosseland, who led the expansion of astrophysical research in Norway in the 1950s and 60s, when the permanent staff of the Institute of Theoretical Astrophysics of the University of Oslo grew from two to nine and major work was initiated in both theoretical and observational solar physics, and then continued it into the 70s, 80s and 90s.

Eberhart was born on a small farm in Røyken south of Oslo on 22 July 1922, and caught a strong interest for astronomy in early childhood. He started studying science at the University of Oslo in 1942, but his studies were interrupted quite violently when the German occupants closed the university on 30 November 1943 and arrested those male students whom they managed to catch, including Eberhart. In the following months they were sent to Germany and spent the time until early May 1945 in several different prison and concentration camps, including Buchenwald. Although treated better than most concentration camp prisoners – only 14 out of the 740 Norwegian students perished – the stay there made its mark on all who lived through the ordeal. One of Eberhart’s favourite stories was how he reacted when, many years later, he told a famous German astronomer that he had been to Germany in 1944 and the astronomer asked him why he hadn’t come by his institute in Freiburg for a visit.

Eberhart resumed his science studies in 1945, received the MSc degree in astronomy in 1949 and then left for the University of Chicago to study for a PhD under the supervision of Subramanyan Chandrasekhar. He received his PhD degree there in 1953. An anecdote tells that all the students were much in awe of Chandrasekhar, and that they especially feared the oral exam he always arranged for new graduate students. Therefore, when Eberhart came smiling into Chandra’s office to be examined, Chandra asked him how he could look amused while all the other students looked terrified. Eberhart then told Chandra, still with a smile on his lips, that after having spent more than a year in concentration camps and having been interrogated by the Gestapo, he couldn’t feel much fear for this little examination.

After his return to Norway, he was appointed university lecturer at the Institute of Theoretical Astrophysics of the University of Oslo in 1959 and reader in 1961. His PhD thesis had been



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within theoretical plasma physics, a field which Eberhart subsequently introduced in Norway. With support from Svein Rosseland and from Gunnar Randers, the director of the Norwegian Institute for Atomic Energy Research, Eberhart built up a strong research group on plasma and fusion research. With a solid background in theoretical plasma physics Eberhart made several significant contributions in his studies of the Sun. In 1955 he published his insightful work on subsurface magnetic buoyancy in the Sun and stars. This effect plays a fundamental role in the formation of sunspots. Eberhart published his result in the French *Annales d’Astrophysique*. Simultaneously and independently, the same result was derived by the American physicist Eugene Parker, who published his results in the more widely read *Astrophysical Journal*, and Eberhart’s work was significantly less noticed.

In 1965 Eberhart succeeded Svein Rosseland in the chair of astronomy at the University of Oslo. Besides being director of the Institute of Theoretical Astrophysics for a long period and editor of the Norwegian *Almanac* from 1966 to 1993, Eberhart continued his excellent scientific work within theoretical and observational solar physics and plasma physics. Maybe the best known among Eberhart’s research achievements is his and Frank Orrall’s discovery of the 3-minute oscillations in the solar chromosphere. In later years his research focused on the physics of solar prominences where he also derived results of fundamental importance.

Eberhart retired in 1992 and both his colleagues and he himself hoped that he would continue his active research and his involvement into the daily life of the institute for many years. Unfortunately, just two years into his retire-

ment, he developed health problems which made research and involvement in the life of the institute impossible, and he died peacefully this January after several years of continually deteriorating health.

Eberhart had a great sense of humour; his colleagues and students remember most of all his laughter and his overwhelming enthusiasm for all of astronomy. In Fred Hoyle’s 1957 novel *The Black Cloud*, one of the main characters is a young Norwegian astronomer with a good sense for jokes called Jensen. It is possible that Eberhart was the model for this character in more than the surname.

Besides science, Eberhart’s main hobby was yachting; he was an active competition sailor and spent all vacations in a yacht, both along the long coast of Norway and in the Mediterranean. He is greatly missed by the whole astronomy community in Norway. Eberhart is survived by his wife Mona, four children and many grandchildren and great-grandchildren.

Eberhart Jensen was elected a Member of the Norwegian Academy of Science and Letters in 1965 and Fellow of the RAS in 1959.

Oddbjørn Engvold and Per B Lilje.

New Fellows

The following were elected as Fellows of the Society on 14 February 2003:

- Mr Philip Allen Banchory, Kincardineshire
- Dr Karen Aplin Space & Science & Technology Dept, Rutherford Appleton Laboratory
- Mrs A M Barnard Kings Lynn, Norfolk
- Miss Angela Beardsmore Canterbury, Kent
- Mr Glenford Richard Bishop Exeter, Devon
- Mr Marcus Cavalier Richmond, Surrey
- Guy David Duckworth Didsbury, Manchester
- Robin William Minto Hughes Richmond, Surrey
- Dr David Kerridge British Geol. Soc., Edinburgh
- Mr R Kingshott Worthing, West Sussex
- L Körtvélyessy Klever Berg 21, D-47533, Germany
- Dr James Kyle Gairloch, Scotland
- Ms Pauline Leader Walthamstow, London
- Dr K B Marvel American Astronomical Society, Washington DC, USA
- Dr Nick Mee Upwey, Dorset
- Dr Karl Mitchell Environmental Science Department, Lancaster University
- Mr L Öpik MP House of Commons, London
- Mr M Pinnock Physical Science Division, British Antarctic Survey, Cambridge
- Mr J A Rees Swansea, Wales
- Dr Enikő Regös Institute of Astronomy, Cambridge
- Mr Paul Ruffle Manchester
- Mr Geoffrey M Sanderson Lincoln
- Prof. Anvar Shukurov School of Mathematics & Statistics, University of Newcastle-upon-Tyne
- Dr Soren-Aksel Sorensen Marlow, Buckinghamshire
- Mr Roger Steer Wotton-Under-Edge, Gloucestershire
- Lord Tanlaw London
- Mr Norman Keith Turner Wembley, Middlesex
- Mr Paul Jonathan Whiting Felixstowe, Suffolk