

CURRICULUM VITAE (Andrzej Kus, Torun Centre for Astronomy)

- **Name** : Andrzej Jan KUS,
- **Present address**: Torun Centre for Astronomy, Radio Astronomy Department, Nicolaus Copernicus University, PL-87100 Torun, Gagarina 11, Poland.
- **Home** : Nalkowskiej 12, PL-87-100 Torun, Poland.
- **Date of birth** : 21st June 1944 in Cracow Poland
- **Marital status** : Married since 1968, with two independent children
- **Secondary qualification** : In 1962 a degree from the High School.
- **Undergraduate Education** : Study at the Nicolaus Copernicus University Torun at the Institute of Astronomy - Physics Faculty, 1962-1967. Supervision by Prof. W.Iwanowska and Prof. S.Gorgolewski, Master thesis in Radio Astronomy.
- **Academic qualifications** : Mgr. (Master of Science) in astronomy from the Nicolaus Copernicus University (NCU), Torun Poland in 1967. Ph.D. in Physics at the Nicolaus Copernicus University in 1975, a habilitation degree (Dr. hab.) 1989 and Docent position at the Nicolaus Copernicus University - May 1990.
- **Professor** position and the Chair of Radio Astronomy from April of 1991.
- **Director** of Torun Radio Astronomy Observatory, Nicholaus Copernicus University 1992-1996.
- **Head** of the Radio Astronomy Department of the Torun Centre for Astronomy, Faculty of Physics and Astronomy, Copernicus University, 1997-2005.
- **Director Torun Centre for Astronomy** from January 1st 2001.
- **Professor title** received (nominated by the President of Poland) in June 2003.

Postgraduate education :

In 1967 employed at Institute of Astronomy, the Nicolaus Copernicus University as a research assistant.

In 1973 I received a special Copernicus Grant from the British Council to study Radio Astronomy at Cambridge University. In 1973-1974 I worked at the Mullard Radio Astronomy Observatory, Cavendish Laboratory Cambridge as a research student under the supervision of Dr. G.G. Pooley and Professor Sir Martin Ryle.

In 1975 I received the Ph.D. degree in Physics from the NCU Torun. The thesis - "The 5C7 Deep Survey of Radio Sources" - based on results obtained during the studies at Cambridge University.

In 1979 I received one year research fellowship from the Manchester University, Nuffield Radio Astronomy Laboratories Jodrell Bank in England. There I started to work on VLBI and MERLIN observations. The experience was gained in fields of VLBI techniques, the image processing and in the OH spectroscopy. The close collaboration with Dr R.S.Booth, Dr P.N.Wilkinson, Dr R.Norris, Dr P.Diamond had proven to be very successful and continued later over many years.

In 1987-1989 I worked as visiting scientist at Onsala Space Observatory Chalmers Technical University in Sweden. In close collaboration with Professor Roy Booth I worked on VLBI at 3 and 1 mm wavelength, on VLBI studies of Compact Steep Spectrum Quasars and on the mm wave study of the Southern Sky radio sources using SEST.

The further continuation of the work at the OSO was possible in 1991/1992 thanks to support received from the OSO and the Swedish Institute.

Several longer visits at the Max-Planck-Institut für Radioastronomie in Bonn (1986, 1992, 1994) has led to a new collaboration with Prof. R. Wielebinski and his group - the study of Inter Stellar Matter (ISM) by means of complex VLBI observations of galactic and extra-galactic sources seen through the plane of the Galaxy. Also studies of radio sources in clusters of galaxies resulted from the co-operation.

Experience in fields of:

Radio astronomy techniques - especially radio interferometry, VLBI, mm VLBI, aperture synthesis, low noise receivers, antennas, extra galactic radio astronomy - physics of radio galaxies and quasars, spectroscopy of OH masers.

Teaching experience :

Lectures for undergraduates on : Extra Galactic Astronomy, Extra Galactic Radio Astronomy, Radio Astronomy, Astronomy and Astrophysics, tutorials in radio astronomy. Supervision of Ph.D. students.

Administrating and managing experience :

Director of Torun Radio Astronomy Observatory (staff of 33 astronomical and technical support personnel) since 1992. Supervision of the 32m. telescope investment project - the second largest scientific investment in Poland. Defining and completion of specialized instrumentation for the telescope. Supervision of telescope operation and the research programme. Organization of international conferences : II EAS Meeting in Torun in 1992, II EVN Symposium in 1994, and several workshops and EVN meetings.

Member of :

- IAU since 1975, URSI 1975, EAS 1992.
- Member of the EVN Consortium from 1992.
- The Royal Astronomical Society Associate from 1995.
- Member of the Polish National Astronomical Committee.
- Member of Physics and Astronomy Faculty
- Member of the Copernicus University Senat
- Member of Astronomical Council of the State Committee for Scientific Research in period of 1992-1996 and 1998-1999.

Last update 2008.06.15

Lista publikacji związana z tematyką projektu

Refereed papers and original articles :

- C.B.Moore, R.C.Vermeulen, C.L.Carilli, F.H.Briggs, I.A.W.Browne, A.G. de Bruyn, J.E.Conway, S.T.Garrington, **A.J.Kus**, K.M.Menten, *VLBI observations of Redshifted HI Absorption Systems at $z=0.2-1$* , Astron. & Astrophys. Suppl., 1999, 193, 408.
- M.Szymczak, G.Hrynek, **A.J.Kus**, *Observations of OH 4767 MHz maser Emission from Star-forming Region*, 1999, MNRAS,
- M.Szymczak, G.Hrynek, **A.J.Kus**, *6.7 GHz Methanol Line Survey of IRAS Sources*, 2000, Astron. & Astrophys. Supp., 143, 269-301
- Szymczak M., **Kus A.J.** *A survey of the 6.7 GHz methanol maser emission from IRAS sources. II. Statistical analysis.* 2000, Astron. & Astrophys., 360,311-318.
- Szymczak M., **Kus A.J.**, *New detections of OH sources towards the 6.7 GHz methanol masers*, 2000, Astron. & Astrophys., 147, 181-185.
- Szymczak M., **Kus A.J.**, Hrynek G., Kepa A., Pazderski E. (2002), *6.7 GHz methanol masers at sites of star formation. A blind survey of the Galactic plane between l 20 – 40 deg and $b < 0.52$ deg.*, A&A, 392, 277-286, (2002)
- Blaszkiewicz, L.; **Kus, A. J.**, *12.2 GHz survey towards 6.7 GHz methanol masers. A comparison of 12.2 GHz and 6.7 GHz spectra*, A&A, 2004, 413,233B.
- Blaszkiewicz, L. P.; **Kus, A. J.** (2004) “*Methanol Survey Towards Star-Forming Sites: Morphology of the 12.2 and 6.7 GHz Spectra*”, Balt.Astr. 13, 474.

Conferences and Symposia :

- Szymczak, M.; **Kus, A. J.**; Hrynek, G., *A blind survey of the 6.7 GHz methanol maser line*, 2002, IAUS, 206, 143.
- Niezurawska A., Szymczak M., Hrynek G., **Kus A.J.**, *Statistics of the 6.7GHz methanol maser variability from the Torun survey*, 2002, IAU Symposium 206, Cosmic Masers: from Protostars to Black Holes,
- Szymczak M., **Kus A.J.**, Hrynek G., *A comprehensive survey of the 6.7GHz methanol maser line*, 2001, IAU Symposium 206, Cosmic Masers: from Protostars to Black Holes, (eds.) Migenes V., Reid M.J., ASP, p.140-143
- Supernovae and Gamma-Ray Bursters. AIP Conference Proceedings, Volume 937, pp. 272-274 (2007).
- Blaszkiewicz, L., **Kus, A.J.**, „*Variability of 6.7 and 12.2 GHz methanol masers*”, 2007 IAUS, 242, 142B.