

CURRICULUM VITAE

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EDUCATIONAL AND PROFESSIONAL BACKGROUND

1975-1981: VWO at the "Stedelijk Gymnasium" Leiden

1981-1987: Astronomy study at the University of Leiden

My subsidiary subjects were theoretical physics and computer science. During my study I carried out undergraduate research projects on observational cosmology (Westerbork data) and modelling of stellar populations in the Galaxy using IRAS data. I carried out observations at Dwingeloo, Nançay and La Silla.

1986: Member of the organizing committee of the XIX Young European Radio Astronomers Conference, Havelte, the Netherlands.

1987-1991: Thesis research on OH/IR stars at the Galactic centre with Prof. Habing

During this period I worked regularly at Socorro and Charlottesville. The thesis work involved many epochs of VLA observations, spectral line VLBI with the EVN and the first VLBA antennas, but also single-dish observations and IR photometry. The interpretation addressed AGB star evolution, interstellar scattering, Galactic dynamics and maser theory.

1989: Teaching assistant of the course "Radiative Processes" by Prof. Icke.

1987-1990: Supervision of the practical course in radio-astronomy for senior level students.

1987-1993: Supervision of the undergraduate research of six students.

1992: Was awarded the "Koninklijke Shell travel award" for best thesis research at Leiden University in 1991.

1992-1993: Postdoc with the "astrochemistry" group of Prof. van Dishoeck

The research during this period involved a number of observing trips to the Owens Valley Millimeter Array. I also observed at the Australian telescope and the WHT. Besides that the SEST, the JCMT, the JCMT-CSO interferometer and the IRAM 30m

were used. Most of the research focused on the small scale distribution of dust and different molecular species in YSOs, but the molecular absorption towards Centaurus A was also subject of research.

1994-1997: JIVE support scientist; from July 1994 at the Socorro VLBA correlator

I was responsible for the EVN data quality and support of European PIs using the new VLBA correlator. This implied debugging the VLBA with respect to global observations. I initiated several research projects with the VLBA. During this period I was also closely involved in the thesis research of 3 Leiden graduate students. The first study focused on circumstellar SiO and H₂O masers in the Galactic centre. Another subject of investigation was the Galactic bar, by surveying the inner Galaxy for OH masers. Both projects used the VLA, as well as the VLBA, applying a number of novel techniques. The third project was an extension of the work on YSOs. Prompted by the VSOP project I developed the extensions to SCHED for MkIV telescopes

1994-1997: Member of the EVN Technical and Operations Group.

1994-1996: Member of the International Mission Operations Group for Space VLBI.

1995-2001: Member of the Scientific Review Committee for VSOP.

1996-2002: Responsible for implementing and maintaining the MkIV extension to SCHED.

1997-2003: Manager Science Operations & Software for the EVN correlator at JIVE

In the assembly phase of the EVN data processor I was responsible for both the testing and the development of the astronomical software. After the dedication of the correlator this developed into the overall commissioning of the data processor. I was in charge of a team of up to 10 people in scientific, software and operational positions. At the same time I applied successfully for funding of an OIO position (in Leiden). This project concerned VLBI astrometry of circumstellar masers, as well as measurements of the Zeeman effect in H₂O masers.

1994-1999: Member of the EVN MkIV Upgrade team.

1996-2001: Member of the Scientific and Technical Advisory Committee for aips++, later the aips++ users group.

1997: Member of the JIVE Management Team, chairman of the Operations Meeting, the Planning Meeting, and Correlator Project Software meetings.

1998-2002: Completed several courses in computer science and management skills.

2001-2002: Member of the Scientific Organizing Committee of the workshop "Long Period Variable stars and their circumstellar matter", Sendai, Japan.

2002: Session convenor during the URSI General Assembly on "radio astronomy at high data rates".

2002-2003: Member of the organizing committee of the workshop "Future directions in AGB star research", honouring H.J. Habing.

2003- : Head Software group at JIVE

Besides the maintenance of the correlator software, this group was involved in several innovative software projects. This includes the Virtual Observatory effort for the EVN, as well as development of a massive parallel backend for the correlator. Moreover, through an EU supported project, we are now developing advanced user

processing techniques. In this context I took the initiative to develop a Python front-end for AIPS called ParselTongue. We started developing eVLBI in which telescopes communicate their data in real time over very wide-band fibre connections; I focused on working out the ideas to use the Grid as a means to identify the CPU power for the next generation correlator.

Through a Marie Curie training network (ESTRELA) JIVE has now one PhD student in Leiden working on methanol masers under my supervision. I share the responsibility for one more student, as well as two postdocs on ALMA and eSMA projects.

1997-2006: Member of the NOVA "onderwijscommissie".

1998-2005: Member of the EVN Program Committee.

2003-2004: Member of the LOC, co-chair of the SOC of the workshop "Dense Molecular Gas around Protostars and in Galactic Nuclei", February 2004, Zwolle.

2005- : Associate Professor at Leiden University for one day a week (nulaanstelling)

I am visiting the Sterrewacht Leiden for one day a week in order to participate in the research of the astrochemistry group, focusing on the millimetre interferometry efforts (ALMA, eSMA).

2003- : International project manager for ALBUS ("Advanced Long Baseline User Software"), part of the FP6 RadioNet effort, member of the RadioNet Executive Board.

2004- : Involved in the eSMA project which includes the JCMT in the SMA array.

2005- : Member of the committee overseeing the establishment of a Dutch node of the ALMA Regional Centre.

2005- : Member of the NOVA Instrument Steering Committee.

2005- : Local node manager for ESTRELA a Marie Curie Early Stage Training network for radio-astronomy.

2005- : International project manager for FABRIC "Future Arrays of Broadband Radio-telescopes on Internet Computing", part of the FP6 EXPReS effort.

2006: Teaching a radio-interferometry course aimed at all astronomy students in the Netherlands.

2006- : Member of the ESO STC, chairman of the VLTI overview committee.

2005-2006: Member of the LOFAR DCLA and calibration review committees.

2007- : Interim director JIVE

I was asked to fill in as director of JIVE starting February 1. During this period I restructured JIVE temporarily to deal with the interim period. I proceeded with the negotiations to renew the JIVE MOU.

2007-: Took over the international responsibilities of the JIVE director, including the membership of various boards: EVN, RadioNet, EXPReS, SKADS, prepSKA.

2007-: Acting as the EXPReS coordinator during its mid-term review.

SKILLS

- teaching: Vast experience and perfect track record in supervising undergraduate and graduate research projects. Regular experience in teaching classes in a wide range of technical and astrophysical topics.
- management: Experience with logistic and operational issues associated with running a large astronomical facility. Competent line manager with good people skills, experienced in steering both experts professionals and technicians. Successfully managed complex, distributed software projects. Familiar with budgetary issues, institute management and funding acquisition.
- software: Confident with a very large range of unix and windows software tools, including a variety of compilers, graphics libraries and data processing systems. Experience in writing and maintaining user applications in Fortran, C++, Python and Perl. Done overall system design for radio-astronomy software problems, including embedded and real-time applications.
- languages: Fluent in Dutch and English, moderate in French, German, Spanish.

PUBLICATION RECORD

My publications record contains 123 entries of which 45 are refereed papers. I have edited one conference proceeding and written several articles for popular science magazines. The list of papers can be found at <http://www.jive.nl/~huib/publications.html>.

SECONDARY OCCUPATIONS

- 1980-1982: Member of the administration of a sports club.
- 1982-1986: A number of organizational functions at a students' society of 600 members: editor of the journal, treasurer of the students' club, chairman of the advisory committee.
- 2001-: Member of the local school "Medezeggenschapsraad", delegate to the "Gemeentelijke Medezeggenschapsraad", chairman of a "Stichting" for financial support. Treasurer of the "Gemeentelijke Bestuurscommissie Openbaar Primair Onderwijs", responsible for 14 schools in and around Hoogeveen.
- hobbies: Sports (volleyball, tennis, soccer, cricket), pop-music, cooking.