

Curriculum Vitae for Michael Olberg

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Academic Degrees

1982-02-10 Diplom (Physik), University of Cologne, Germany

1984-11-10 Dr rer nat, University of Cologne, Germany

Career

1984–1985 Assistant (wissenschaftliche Hilfskraft) at University of Cologne.

1985–1986 ESO fellow at Onsala Space Observatory working with software development for SEST.

1986–1989 Transfer to La Silla, Chile, and working as Telescope software scientist during the construction, commissioning and early years of SEST.

1989–now Employment as research engineer (1:e forskningsingenjör) at Onsala Space Observatory. Scientific work in the area of star formation and molecular outflows. Upgrade of the control system of the Onsala 20 m telescope, development of a new digital control loop. Programming and commissioning of new hybrid auto-correlator spectrometers for the Onsala antennas.

Former member of ESO OPC panel C: interstellar medium and star formation. Former member of the Danish “Censorkorpset i Fysik” in the area of radio astronomy. Chairman of the computer committee at the observatory. Odin SMR data manager at Onsala Observatory.

2007–2010 HIFI calibration manager. During the period from 2008-07-01 to 2009-12-31 stationed at SRON-Groningen, NL.

Experience

Odin: Development of data reduction and calibration software for (sub-)mm data from the Odin satellite, both for the astronomy and aeronomy part of the mission. Main author on one, co-author on nine Odin Letters to A&A, published in the A&A special issue 402, 2003.

Herschel/HIFI: Representation of Sweden in HIFI consortium meetings and steering committee meetings, HIFI calibration review and HIFI line identification group meeting. Attendance of HIFI calibration group, ICC group meetings and HCSS training sessions. Work as co-PI on the outflow part of the HIFI GT-KP “WISH” (Water In Star forming regions with Herschel). HIFI calibration manager since Sep 2007.

Teaching: Lecturer in “Observational Astrophysics” 1997-1999, assisting lecturer in “Quantum Electronics” 2001-2002. Successful completion of Chalmers “Diploma of Higher Education” in 2006.

Supervising: Supervisor for three Danish and several Swedish students during the time of their masters thesis. Supervisor for Allen S. Nielsen as PhD student. Main supervisor for Carina Persson, SNSB funded PhD student at Onsala Space Observatory.

Astronomy: Star formation, molecular outflows, interstellar physics and chemistry, molecular spectroscopy.

Instrumentation: Firm knowledge of various designs of radio astronomical spectrometers, such as acousto-optical and auto-correlator devices. Radio telescopes and (sub)mm receivers. Telescope control systems. Real-time systems and programming.

Computing: Operating systems, Linux. Programming languages, numerical mathematics, data reduction techniques, database handling.

List of selected publications

References

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