

# Curriculum vitae

## Personal information

name Paul Peter van der Werf  
date of birth March 8, 1961  
citizenship Dutch citizen

## Present address

Sterrewacht Leiden, Leiden University  
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## Degrees

Bachelor's Degree in astronomy (*Cum laude*)  
University of Groningen, The Netherlands, October 1982  
Master's Degree in astronomy (*Cum laude*)  
University of Groningen, The Netherlands, December 1984  
Ph.D. Degree in astronomy  
University of Groningen, The Netherlands, September 1989

## Ph.D. Thesis

title An H I study of H II regions and dark clouds  
date September 8, 1989  
promotores Prof. Dr. W.M. Goss  
Prof. Dr. R. Sancisi

## Main research interests

(Ultra)luminous infrared galaxies  
Galactic and extragalactic interstellar medium  
Infrared and submillimetre galaxies and galaxy evolution  
Infrared and submillimetre instrumentation and techniques

## Publications

refereed journals 318  
invited reviews 21  
other conference contributions 132  
edited conference proceedings 1  
total citations 14209  
papers with > 100 citations 33  
Hirsch citation index 67

*(Curriculum vitae, continued):*

**Positions held**

- November 2012 - present  
Professor of Extragalactic Astrophysics, Leiden Observatory, University of Leiden, The Netherlands.
- January 2003 - October 2012  
Associate Professor (Universitair hoofddocent), Leiden Observatory, University of Leiden, The Netherlands.
- July 1997 - December 2002  
Assistant Professor (Universitair docent), Leiden Observatory, University of Leiden, The Netherlands.
- July 1994 - June 1997  
Fellowship of the Royal Netherlands Academy of Arts and Sciences, Leiden Observatory, University of Leiden, The Netherlands.
- May 1993 - June 1994:  
ESO fellowship, European Southern Observatory, Garching bei München, Germany.
- 1990 - April 1993:  
MPG fellowship, Max-Planck-Institut für extraterrestrische Physik, Garching bei München, Germany.
- 1985 - 1989:  
NWO Research Associateship, Kapteyn Astronomical Institute, University of Groningen, The Netherlands.

**Long-term visits**

- July - December 2010  
Distinguished Visitor, Scottish Universities Physics Alliance, Institute for Astronomy, University of Edinburgh, Edinburgh, Scotland.

**Selected memberships of scientific committees and consortia**

- Associate investigator, ISO Short Wavelength Spectrometer (1990 - 1997)
- Member, ESO Advisory Group on (sub)mm Astronomy (1995)
- Member, ESO Users Committee (1998-2001)
- Member, VISIR Science team (1998-2005)
- Member, ASTRON Time Allocation Panel La Palma/JCMT/WSRT (1996-1999 and 2008-2009)
- Member, ESO Observing Programmes Committee, Galaxies panel (co-chair, since 2009)
- Member, NWO Research grant allocation panel (1997-1999, 2003, 2005, 2006, 2010)
- Member, Scientific Organizing Committee of many international conferences
- Co-investigator, HIFI (Heterodyne Instrument for the Far Infrared) (since 1997)
- Co-investigator, JWST-MIRI (since 2009)
- Principal Investigator, NOVA components of SINFONI (1999-2007)
- Member, PPARC Astronomy Advisory Panel (2001-2003)
- Member, JCMT Board (2003-2013)
- Chairman, JCMT Survey Oversight Committee (2007-2008)
- Principal Investigator, SCUBA-2 Cosmology Legacy Survey (since 2005)
- Principal Investigator, Herschel Open Time Key Program HerCULES (since 2007)
- Member, STFC Herschel Oversight Committee (since 2008)
- Member, TAMASIS (Tools for Advanced Map-making, Analysis and Simulations of Submillimeter surveys) network (since 2009)
- Project scientist, APEX MKIDS submillimetre camera (since 2011)

*(Curriculum vitae, continued):*

### **Professional organizations**

- Nederlandse Astronomen Club
- American Astronomical Society
- International Astronomical Union

### **Selected organizational and administrative responsibilities**

- Organizer of colloquium series, Leiden Observatory, Leiden, The Netherlands (1995–2000)
- Member of Graduate Student Supervision Committee, Leiden Observatory, Leiden, The Netherlands (1997–2001 and 2009–2010)
- Member of Computing Committee, Leiden Observatory, Leiden, The Netherlands (1997–2001)
- Chairman of Computing Committee, Leiden Observatory, Leiden, The Netherlands (2001–2005)
- Member of Board of Examiners, Leiden Observatory, Leiden, The Netherlands (1998–2011)
- Member of Education Committee, Leiden Observatory, Leiden, The Netherlands (2000–2004)
- Chairman of Education Committee, Leiden Observatory, Leiden, The Netherlands (2005–2009)
- Member of Research Committee, Leiden Observatory, Leiden, The Netherlands (since 2001)
- Study coordinator B.Sc students, Leiden Observatory, Leiden, The Netherlands (2000–2004)
- Member Faculty Council, Faculty of Science, Leiden University, Leiden, The Netherlands (2007–2011)
- Director of Studies, Leiden Observatory, Leiden University, Leiden, The Netherlands (since 2011)

### **Instrumental interests and expertise:**

- Infrared and submillimetre imaging and spectroscopy
- Submillimetre and radio aperture synthesis
- Integral field spectroscopy
- Adaptive optics

### **Instrument development:**

- Development, testing and implementation of control interfaces, observing modes and calibration procedures for near-infrared array cameras and near-infrared Fabry-Perot etalons (1990–1993)
- Commissioning, IRAC1 mid-infrared camera on the ESO/MPI 2.2 m telescope at La Silla, Chile (1994)
- Member of conceptional design review panel, ESO Multiple Application Concept for Adaptive Optics (MACAO) system for VLTI (2000)
- Member of preliminary design review panel, ESO adaptive optics unit for SINFONI (2000)
- Principal investigator, NOVA components of SINFONI at the ESO VLT (since 1999)
- Member, ESA JWST Payload Study team (1998-1999)
- Member of final design review board, SINFONI spectrograph (2001)
- Member of preliminary design review board, SINFONI 2K camera (2002)
- Member, SAFARI/SPICA Science team (since 2005)
- Member, METIS Science team (since 2004)
- Project scientist, AMKID submm camera for APEX (since 2011)
- Principal Investigator, DESHIMA submillimetre spectrograph (since 2012)

(*Curriculum vitae, continued*):

**Grants obtained as Principal Investigator:**

- 300 k $\text{f}$  KNAW Academieonderzoeker (1994-1997)
- 289 k $\text{f}$  in EU-FP6 RTN European Large Area ISO Survey for Postdoc (1998)
- 250 k $\text{f}$  NWO Open competition for Ph.D. student (Star formation and feedback in galaxies, 1999)
- 1100 k $\text{€}$  NOVA grant for development of SINFONI spectrograph camera and software (1999)
- 257 k $\text{f}$  NWO Open competition for Ph.D. student (Submillimetre galaxies, 2000)
- 123 k $\text{€}$  in EU-FP7 RTN Probing the Origin of the Infrared Background for Postdoc (2000)
- 109 k $\text{€}$  NOVA Network 1 for Ph.D. student (Ultraluminous infrared galaxies, 2005)
- 183 k $\text{€}$  NWO Open competition for Postdoc (JCMT Cosmology Legacy Survey, 2007)
- 213 k $\text{€}$  NWO-Astronet for Postdoc (Extragalactic submillimetre astronomy, 2009)
- 220 k $\text{€}$  NOVA Network 1 for Postdoc (Herschel spectroscopy, 2009)
- 220 k $\text{€}$  NOVA Network 1 for Ph.D. student (Interstellar medium in starburst galaxies, 2009)
- 7 k $\text{£}$  Distinguished Visitor Grant, Scottish Universities Physics Alliance (2010)
- 755 k $\text{€}$  NWO-M grant for development of DESHIMA, an MKIDS-based submillimetre spectrograph with on-chip dispersion (2012)
- 8.64 k $\text{£}$  Royal Society grant for collaboration with Rob Ivison (2012)
- 440 k $\text{€}$  NOVA Network 1 for Ph.D. student ( $\text{H}_2\text{O}$  in galactic nuclei, 2013)

**Observing time obtained as Principal Investigator:**

- ESO Very Large Telescope: 38 nights
- Herschel Space Observatory: 320 hours (including an Open Time Key Program)
- James Clerk Maxwell Telescope: 2900 hours (including the JCMT Cosmology Legacy Survey)
- Atacama Large Millimeter Array (ALMA): 3 hours in Cycle 0, 6 hours Cycle 1 (top priority), 5 hours in Cycle 2 (top priority)
- Hubble Space Telescope (HST): 14 orbits
- Infrared Space Observatory (ISO): 46 hours
- Spitzer Space Telescope: 38 hours
- IRAM 30 m telescope: 250 hours
- IRAM Plateau de Bure Interferometer: 16 tracks
- Jansky Very Large Array: 48 hours
- Incidental P.I. programs at many other telescopes including ESO 3.6 m and New Technology Telescope, William Herschel Telescope, Cerro Tololo 4 m telescope, Owens Valley Radio Observatory, Green Bank Telescope and Atacama Pathfinder Experiment (APEX).

**Teaching:**

- Astronomical Observing Techniques (level 300): 1997-2001
- Starburst galaxies (NOVA Fall School): 2000
- Star formation in galaxies (Interacademic lectures): 2002
- Introductory astrophysics (level 100): 2001–2003
- Planets and exoplanets (in *The living universe* lecture series): 2003
- The early universe (Interacademic lectures): 2003
- First year Astronomy Lab (level 100): 2006–2008
- Second year Astronomy Lab (level 200): 2009–2011
- Interstellar Medium (level 500): 2012
- Third place, Teacher of the Year Award, Faculty of Science, Leiden University: 2008

*(Curriculum vitae, continued):*

**Undergraduate student supervision:**

- Roel van Bree (M.Sc. December 1997): H<sub>2</sub> emission from the circumnuclear ring in the centre of the Milky Way
- Martin Storm (M.Sc. February 1998): Near-infrared spectroscopy of the central regions of active and starburst galaxies - modeling the star formation
- Martijn Kamerbeek (M.Sc. August 2000): The evolution of dusty galaxies
- Glenn van de Ven (M.Sc. September 2001): The superstarclusters in the Antennae galaxies - constraints on the Initial Mass Function
- Lottie van Starckenburg (M.Sc. August 2002): Photometric redshifts
- Leonie Snijders (M.Sc. September 2003): Obscured star formation in the Antennae
- Mariska Kriek (M.Sc. August 2003): A near-infrared spectroscopic study of the dusty disk in Centaurus A
- Karín Menéndez-Delmestre (Fulbright fellow): Near-infrared imaging of star formation in Cen A's dustlane
- Guido Koster (M.Sc. May 2006): H<sub>2</sub> emission from the central region of the merger galaxy NGC 6240
- Susanne Brown (M.Sc. 2008): L-band imaging of the starburst galaxy NGC 253
- Pascal Baars (M.Sc. 2008): The starburst galaxy He 2-10
- Marten Hamelink (M.Sc. 2008): NGC 7552: the circumnuclear starburst
- Liviu Știrbăț (M.Sc. 2008): SINFONI observations of the starburst galaxy NGC 5253: the hottest stars
- Charlotte de Valk (M.Sc. 2009): Dust emission from the superstarclusters in the Antennae
- Alireza Rahmati (M.Sc. 2009): A model for the infrared galaxy population
- Renske Smit (M.Sc. 2010): Kinematics of outflowing high-excitation gas in the nucleus of Centaurus A
- Annelies Mortier (M.Sc. 2010): The relation between star formation rate and physical properties in nearby galaxies
- Siebe Weersma (M.Sc. 2012): Cooling radiation in (Ultra)luminous Infrared Galaxies
- Vincent Oomen (M.Sc. 2013): Molecular gas in NGC 4418
- Nikki Zabel (M.Sc. 2015): Radiative excitation of CO lines under extreme conditions
- Tom Warmerdam (M.Sc. 2017): H<sub>2</sub>O emission and no molecular outflow in the Eyclesg galaxy

**Graduate student supervision:**

- Eleni Chatzichristou: Imaging and bidimensional spectroscopy of active and interacting galaxies (referent; promotor G.K. Miley; Ph.D. June 15, 1999)
- Laura Pentericci: The most distant radio galaxies: probes of massive galaxy formation (referent; promotor G.K. Miley; Ph.D. October 28, 1999)
- Kirsten Kraiberg Knudsen: Deep submillimetre observations of faint dusty galaxies (copromotor; promotor M. Franx; Ph.D. October 6, 2004)
- Inti Pelupessy: Numerical studies of the interstellar medium on galactic scales (copromotor; promotor V. Icke; Ph.D. March 16, 2005)
- Leonie Snijders: Extreme starformation in starburst galaxies (copromotor; promotor M. Franx; Ph.D. November 28, 2007)
- Lottie van Starckenburg: Near-infrared spectroscopy of high redshift galaxies (copromotor; promotor M. Franx; Ph.D. December 6, 2008)
- Liesbeth Vermaas: Spectroscopy and dynamics of luminous infrared galaxies (copromotor; promotor F. Israel; Ph.D. January 11, 2012)
- Marissa Rosenberg: Feeding and feedback in starburst galaxies (Ph.D. September 18, 2014)
- Laura Bisigello: Distant galaxies observed with APEX and JWST (to obtain Ph.D. in 2017)
- Leindert Boogaard: Distant galaxies observed with MUSE and ALMA (to obtain Ph.D. in 2020)
- Kirsty Butler: Molecular outflows from luminous high-redshift galaxies (to obtain Ph.D. in 2021)

*(Curriculum vitae, continued):*

**Postdoctoral researchers appointed:**

- Padelis Papadopoulos: gas and dust in distant galaxies (1998-2001)
- Sabine Mengel: superstarclusters (2000-2002)
- Anthony Brown: adaptive optics with laser guide stars (2001-2004)
- Tracy Webb: submillimetre cosmology (2002-2005)
- Juha Reunanen: near-infrared integral field spectroscopy (2005-2007)
- Catherine Vlahakis: the SCUBA-2 Cosmology Legacy Survey (2007-2010)
- Edo Loenen: extragalactic submillimetre spectroscopy with Herschel (2009-2012)
- Rowin Meijerink: exploitation of photometric and spectroscopic submillimetre surveys (since 2010)
- Alicia Berciano Alba: the ISM in strongly lensed galaxies (2011-2013)