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

telephone

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

 $\begin{array}{lll} {\rm refereed\ journals} & 318 \\ {\rm invited\ reviews} & 21 \\ {\rm other\ conference\ contributions} & 132 \\ {\rm edited\ conference\ proceedings} & 1 \\ {\rm total\ citations} & 14209 \\ {\rm papers\ with} > 100\ {\rm citations} & 33 \\ {\rm Hirsch\ citation\ index} & 67 \\ \end{array}$

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 Astronmy (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)

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)
- \bullet 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)

Grants obtained as Principal Investigator:

- 300 kf KNAW Academieonderzoeker (1994-1997)
- 289 kf in EU-FP6 RTN European Large Area ISO Survey for Postdoc (1998)
- 250 kf NWO Open competition for Ph.D. student (Star formation and feedback in galaxies, 1999)
- 1100 k€ NOVA grant for development of SINFONI spectrograph camera and software (1999)
- 257 kf NWO Open competition for Ph.D. student (Submillimetre galaxies, 2000)
- 123 k€ in EU-FP7 RTN Probing the Origin of the Infrared Background for Postdoc (2000)
- 109 k€ NOVA Network 1 for Ph.D. student (Ultraluminous infrared galaxies, 2005)
- 183 k€ NWO Open competition for Postdoc (JCMT Cosmology Legacy Survey, 2007)
- 213 k€ NWO-Astronet for Postdoc (Extragalactic submillimetre astronomy, 2009)
- 220 k€ NOVA Network 1 for Postdoc (Herschel spectroscopy, 2009)
- 220 k€ NOVA Network 1 for Ph.D. student (Interstellar medium in starburst galaxies, 2009)
- 7 k£ Distinguished Visitor Grant, Scottish Universities Physics Alliance (2010)
- 755 k€ NWO-M grant for development of DESHIMA, an MKIDS-based submillimetre spectrograph with on-chip dispersion (2012)
- 8.64 k£ Royal Society grant for collaboration with Rob Ivison (2012)
- 440 k€ NOVA Network 1 for Ph.D. student (H₂O 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

Undergraduate student supervision:

- Roel van Bree (M.Sc. December 1997): H₂ 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 Starkenburg (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 Kosters (M.Sc. May 2006): H₂ 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 Ştirbăt (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): H₂O emission and no molecular outflow in the Eyelasg 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 Starkenburg: 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. Janauary 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)

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)