

# Peter Schneider

## Curriculum Vita

### Personal Data

Born: Sept. 15, 1958

Nationality: German

Argelander-Institut für Astronomie

Universität Bonn

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### Degrees:

**June 1993** Privatdozent at the University of Munich

**Feb. 1992** Habilitation in the faculty of Physics at the University of Munich

**Aug. 1984** Ph.D. in Physics, University of Bonn

**July 1983** Physics Diploma, University of Bonn

**June 1977** Abitur (High-School diploma) at the Leibniz Gymnasium, Düsseldorf

### Employments:

**since 1/2006** Founding director of the Argelander-Institut für Astronomie, Bonn

**12/02 – 12/05** Director of the Institut für Astrophysik und Extraterrestrische Forschung,  
University of Bonn

**since 3/00** Full Professor for Astrophysics at the University of Bonn

**5/98 – 7/98** Poste Rouge visiting scientist at Observatoire Midi-Pyrenees, Toulouse

**4/93 – 2/00** Tenured staff member at the Max-Planck-Institut für Astrophysik

**10/92 – 3/93** Professorship at the Munich Observatory in substitution of H.-G. Groth

**8/91 – 9/92** Tenured staff member at the Max-Planck-Institut für Astrophysik

**9/87 – 7/91** Research associate at the Max-Planck-Institut für Astrophysik

**8/87** Smithsonian Fellow at the Center for Astrophysics, Cambridge, Massachusetts

**2/86 – 7/87** Research associate at the Joint Institute for Laboratory Astrophysics, University  
of Colorado, Boulder

**9/84 – 1/86** Research associate at the Max-Planck-Institut für Astrophysik

**8/83 – 8/84** Research assistant at the Max-Planck-Institut für Astrophysik

## Awards:

- Dieter-Rampacher-Preis 1985, awarded for the youngest Ph.D. in the Max-Planck-Society
- Otto-Hahn-Medaille der Max-Planck-Gesellschaft 1985
- GEFFRUB-Preis der Universität Bonn 1985
- Physik-Preis der Akademie der Wissenschaften zu Göttingen 1986
- Membership Deutsche Akademie der Naturforscher Leopoldina 2003
- Appointment offer: Chair in Astrophysics, Imperial College London, 2006 (declined)
- Appointment offer: Full Professor of Physics, School of Basic Sciences, École Polytechnique Fédérale de Lausanne, 2007 (declined)

## Editorship:

**2/98 – 1/06** Letters Editor of *Astronomy & Astrophysics*;

as such, also Editor of the Special Letters Issues on:

- First Science with XMM-Newton, *A&A* 365, No.1, 56 papers (Jan. 2001)
- First Science with INTEGRAL, *A&A* 411, No.1, 75 papers (Nov. 2003)
- and several smaller Special Issues.

## Organization of Conferences, Workshops and Schools:

A ‘\*’ indicates events where I did a large fraction ( $\geq 30\%$ ) or most of the work.

**08/09** Member of SOC of the DUEL Cosmology and Lensing Summer School 2009, Paris

**05/09** \* Organizer of the Workshop “Evolution of galaxies” within the DFG-Priority Program, Bad Honnef.

**04/09** Member of the SOC of the Symposium “Three decades of gravitational lenses”, Hertfordshire, UK.

**01/09** \* Organizer of a two-day Evaluation Workshop on the DFG Priority Programme “Witnesses of Cosmic Evolution”, Bad Honnef

**10/08** Member of SOC of the 3rd Biennial Leopoldina Conference on Dark Energy, Munich.

**10/07** \* Organizer of the Workshop “Evolution of galaxies” within the DFG-Priority Program, Bad Honnef.

**07/07** Member of the SOC of the conference “Data Analysis in Cosmology 2007”, Santander, Spain

**01/07** \* Organizer of a two-day Evaluation Workshop on the DFG Priority Programme “Witnesses of Cosmic Evolution”, Bad Honnef

**09/06** Co-Organizer of the Workshop on “Applications Of Gravitational Lensing: Unique Insights Into Galaxy Formation And Evolution”, Kavli Institute for Theoretical Physics, Santa Barbara, California

- 07/06** Member of SOC of the Oort Workshop on “Gravitational Lensing”, Lorentz Center, Leiden, The Netherlands
- 07/06** \* Organizer of the International Summer School on “Evolution of galaxies and their large-scale environment”, Bad Honnef
- 11/05** Member of SOC of “Relativistic Astrophysics and Cosmology – Einstein’s Legacy”, Munich
- 9/05** \* Organizer of the Workshop “Evolution of galaxies” within the DFG-Priority Program, Kloster Irsee.
- 11/04** \* Organizer of a two-day Evaluation Workshop on the DFG Priority Programme “Witnesses of Cosmic Evolution”, Bad Honnef
- 7/04** Member of SOC of “Impact of Gravitational Lensing on Cosmology”, IAU Symposium 225, Lausanne, Switzerland
- 12/03** \* Co-organizer of the WE-Heraeus Workshop “Dark Matter and Dark Energy: Joint challenges for particle physics and cosmology”, Bad Honnef
- 11/03** \* Organizer of a two-day discussion meeting (“Rundgespräch”) “Structure and Evolution in the Universe”, Bad Honnef
- 5/03** Member of SOC of “Satellites and Tidal Streams”, La Palma, Spain
- 1/03** Member of SOC of “Gravitational Lensing: A unique tool for Cosmology”, Aussois, France
- 11/02** \* Organizer of a two-day discussion meeting (“Rundgespräch”) “Structure and evolution of dark matter halos”, Bad Honnef
- 7/02** Co-organizer of the Workshop “Gravitational Lenses 2002”, Ringberg Castle
- 8/00** Member of SOC of IAU Symposium 201, Manchester
- 3/99** \* Co-organizer of a Workshop on Clusters of Galaxies at High Redshift in Antofagasta, Chile
- 1/97** \* Organizer of a Workshop on Cluster and Weak Gravitational Lensing at the Ringberg Castle, Tegernsee
- 10/96** Co-organizer of a Workshop on Astro-Particle Physics at the Ringberg Castle, Tegernsee
- 10/96** \* Co-organizer of a School on Astro-Particle Physics at the Technical University of Munich
- 7/95** \* Organizer of a Workshop on Cluster Lensing within the 173th IAU Symposium on Astrophysical Applications of Gravitational Lensing, Melbourne, Australia
- 12/94** \* Organizer of a Mini-Symposium on Gravitational Lensing within the 17th Texas Symposia on Relativistic Astrophysics in München
- 4/94** \* Organizer of a Workshop on Gravitational Lensing within the meeting of the Royal Astronomical Society and the European Astronomical Society in Edinburgh (ENAM 94)
- 9/93** \* Organizer of a Workshop on Evolution of Cosmic Structure within the meeting of the Astronomische Gesellschaft in Bochum
- 6/89** \* Co-organizer of a Workshop on Cosmology and Gravitational Lensing at the Ringberg Castle

**3/85** \* Organization of a Workshop on Gravitational Lensing at the Meeting of the Astronomische Gesellschaft in Frankfurt

## **Panel work:**

**2009/10** Member of an appointment committee at Hamburg University

**since 2009** Member of the Scientific Advisory Board of the Astrophysikalisches Institut Potsdam

**2008** Member of the European Dark Energy Mission Concept Advisory Team, ESA

**since 07** Member of the Herschel Observing Time Allocation Committee (HOTAC)

**03/07** Panelist of the Cycle 16 Hubble Space Telescope Time Allocation Committee

**since 07** Node coordinator of the DUEL (Dark Universe with Extragalactic Lensing) RTN Network

**since 06** Member of the Steering Committee and the Selection Committee of the Graduate School in Physics and Astronomy at the Universities of Bonn and Cologne

**2006/07** Member of Panel A of the ASTRONET European Science Vision for Astronomy

**2006/07** Member of the OPC Nominating Committee of ESO

**since 06** Member of the Program Committee (Programmausschuss) Extraterrestrik of the German Space Agency (DLR)

**05 – 06** Co-Chair of the ESA/ESO Working Group on Fundamental Cosmology (see O81 and O82 in the Publication List)

**05/05** Member of the audit committee of the Institute of Physics of Energy and Particles and the Centre of Research in Plasma Physics, Lausanne, Switzerland

**since 05** Member of the Evaluation Committee (Auswahlausschuss) of the Alexander von Humboldt-Stiftung

**04 – 06** Co-Chair of the ‘Research Group’ on ‘Dark Matter & Dark Energy: The future of the Universe’ at the University of Bonn

**since 04** Coordinator of the Priority Programme (Schwerpunktprogramm) of the Deutsche Forschungsgemeinschaft, ‘Witnesses of Cosmic History: Formation and evolution of BHs, galaxies and their environments’

**1/04** Member of an Evaluation Panel for DFG Graduate Schools, Bonn

**03 – 06** Member of the Astronomy Working Group of the European Space Agency

**02 – 03** Member of the Appointment Committee for a director at the Max-Planck-Institut für Radioastronomie

**02 – 05** Member of the Board of the Bochum/Bonn Graduate School (DFG Graduiertenkolleg) ‘Galaxy groups as laboratories for dark and baryonic matter’

**02 – 06** Member of the Board of the ‘International Max-Planck Research School for Radio and Infrared Astronomy at the University of Bonn’

**01 – 04** Member of the Board of the ‘Bonn International Graduate School in Mathematics, Physics and Astronomy’

- 01 – 03** Member of the *Redaktionskommittee* for the German Decadal Report on Astronomy (*DFG-Denkschrift*; see B2 in the Publication List)
- since 00** Member/Chair of the several appointment committees for professorships at the University of Bonn
- 99 – 01** Member of the Appointment Committee for a director at the Max-Planck-Institut für Astronomie
- 98 – 01** Member of the VIRMOS Instrument Science Team
- 98 – 04** Member of the ESA NGST Study Science Team
- 98 – 03** Coordinator of the Garching node of the TMR Network “Gravitational Lensing: New constraints on Cosmology and The Distribution of Dark Matter” of the European Union
- 98 – 00** ESA-member of the US Ad-hoc Science Working Group for the Next Generation Space Telescope
- 97 – 00** Representative in the chemical-physical-technical Sektion of the Max-Planck-Gesellschaft
- 96 – 00** Member of the Working Group for the ESO Imaging Survey
- 11/96** Member of the Hubble Space Telescope Time Allocation Committee, panel Cosmology
- 95 – 97** Member of the European VLBI Network Programme Committee
- 95 – 00** Member of the Board of the European Association for Research in Astronomy
- 95 – 98** Member of the Physics Panel of the TMR Programme of the European Commission (Marie Curie Fellowships)
- 94 – 99** Member of several appointment committees at the Max-Planck-Institut für Astrophysik

# Teaching

All the lectures and seminars listed here were taught in English, except the introductory course on Extragalactic Astronomy which, targeted to first year students, is given in German.

## (a) Lectures and Seminars:

### At the University of Munich

- Seminar on gravitational lenses (together with R.-P. Kudritzki & A. Weiss): WS 90/91
- Lecture course on Quasars: WS92/93
- Lecture course on Theory and Application of Gravitational Lensing: SS93, WS96/97
- Lecture course on Radiation Processes in Astrophysics (with exercises): WS93/94
- Seminar on Selected Problems in Gravitational Lensing: WS93/94
- Lecture course on Galaxy Clusters: SS94
- Seminar on Clusters of Galaxies(with M. Bartelmann): WS95/96
- Seminar on Selected Problems in Gravitational Lensing: SS97

### At the University of Bonn

- Lecture course on Gravitational Lensing and Cosmological Applications: SS00, SS02, SS04, SS05, SS07; SS08 & SS09 together with O. Wucknitz
- Seminar on Astrophysics (with other astrophysicists in Bonn): This seminar is given every semester, and I participate since my arrival in Bonn
- Lecture course on Theoretical Astrophysics I: WS00/01
- Lecture course on Theoretical Astrophysics II: SS01
- Seminar on Selected Problems in Gravitational Lensing: Since WS00/01, this seminar is hold every semester
- Lecture course on Introduction to Extragalactic Astronomy: Since SS01, this course is given every summer semester. The lecture notes of this course have been expanded into a textbook (see B3 and B5 in Publication List)
- Lecture Course on Cosmology: Since WS01/02, this 3+1 hour lecture course is given every winter semester
- Lecture course on Astroparticle Physics (together with M. Drees): SS06
- Seminar on Modern Cosmology: SS06, SS07, SS08, SS09
- Seminar on Statistical Methods in Astrophysics, WS07/08, WS09/10

### Other

**9/91** Four lectures on Gravitational lensing (with J. Ehlers), at the Heraeus Seminar on Relativistic gravity research, Bad Honnef (see O13)

**WS94/95** Two lectures on Introduction to Cosmology, TU München

- 9/95** Two lectures on Cosmological Applications of Gravitational Lensing, at the Laredo Advanced School on Astrophysics: The universe at high  $z$ , large-scale structure and the Cosmic Microwave Background, Laredo, Spain (see O20)
- Feb. 99** Lecture course on Gravitational Lensing, Teneriffe, Spain (total of 15 h)
- Nov. 02** Lecturer at the XIV Canary Islands Winter School of Astrophysics “Dark Matter and Dark Energy in the Universe”, Teneriffe (see O60)
- Jan. 03** Lecturer at the Winter school “Gravitational Lensing: A unique tool for cosmology”, Aussois, France (see O58)
- April 03** Lecturer at the 33rd Advanced Saas-Fee Course of the Swiss Society for Astrophysics and Astronomy, Switzerland (see B4, O73 & O74)
- Sept. 03** Lecturer at the “Second European Summer School on ”Experimental Nuclear Astrophysics”, Santa Tecla, Italy
- Oct. 03** IMPRS Lecture course (15 hours) on “Applied Math Methods”, Univ. Bonn
- July/04** Lecturer at the International WE-Heraeus-Summer School “Physics with Cosmic Accelerators”, Bad Honnef
- 07/05** Lecturer and tutor at the Alpach Summer School 2005 on “Dark Energy and Dark Matter in the Universe” (see O80)
- 07/06** Lecturer at the DPG-School of Physics, “Dark Matter and Dark Energy”, Bad Honnef
- 12/06** Lectures on “Weak gravitational lensing” at the University of Geneve, Switzerland ( $4 \times 3$  hours), in the frame of Troisième cycle de la physique en Suisse romande
- 03/08** Lecture course on “Cosmology” at the Observatorio Astronómico Nacional, Universidad Nacional de Colombia, Bogota
- 08/09** Three lectures on “Theory of weak gravitational lensing” at the DUEL Cosmology and Lensing Summer School 2009, Paris

### **(b) Supervision of Diploma thesis projects:**

- H. Erdl** Classification of the critical curves of the two point-mass gravitational lens, March 1990
- M. Bartelmann** The influence of a combination of micro- and macrolensing on the statistics of cosmological objects, May 1990
- M. Freyberg** Light propagation in inhomogeneous universes, June 1990
- R. Kormann** Isothermal elliptical gravitational lenses, November 1992
- S. Seitz** Light propagation in General Relativity and in gravitational lens theory, March 1993
- C. Seitz** Calculation of the autocorrelation function of microlensing light curves, April 1993
- A. Bartsch** Statistical investigations on the association of quasars with foreground galaxies, March 1995
- B. Geiger** Determination of time delays in gravitational lens systems, May 1995
- N. Deiser** Statistical methods for determining the lens distortion, August 1995

- G.-H. Lescow** Determination of an upper limit on the cosmological density of compact objects with sub-solar mass, August 1995
- T. Erben** The determination of properties of galaxies with galaxy-galaxy lensing, March 1997
- H. Hämmerle** Investigation of the halo of galaxies in clusters with the gravitational lens effect, Aug. 1999
- M. Bradač** Substructure in the gravitationally lensed system B1422+231, Sept. 2001
- J.P. Dietrich** Light and mass distribution of pairs of galaxy clusters, May 2002
- M. Kilbinger** Observing strategy for a cosmic shear survey, Sept. 2002
- L. Bähren** A new method for the extraction of relative magnification matrices from VLBI observations of gravitational lens systems, Feb. 2003
- M. Hetterscheidt** Galaxienhaufensuche mit Hilfe des schwachen Gravitationslinseneffektes, July 2003
- A. von der Linden** The Dark Clump near Abell 1942: Dark Matter Halo or Statistical Fluke?, March 2004
- T. Schrabback** Measuring Cosmic Shear using the Advanced Camera for Surveys on board HST, March 2004
- H.J. Hildebrandt** Multicolour Photometry in the ESO Deep-Public-Survey, Jan. 2005
- T.F. Eifler** Optimized Analysis of Cosmic Shear Data, March 2005
- J. Hartlap** Studying Galaxy-Galaxy-Lensing Using Ray-Tracing Simulations, Oct. 2005
- D. Weghorn** Investigation of Baryonic Acoustic Oscillations with Galaxy-Galaxy Lensing, June 2007
- B. Joachimi** Analysis of second-order statistics of cosmic shear: Covariances and contamination by shear-ellipticity correlations, Sept. 2007
- D. Wuttke** Analysis of the most luminous X-ray cluster RXJ1247–1145 by gravitational lensing, June 2008
- A. Böhnert** A novel method for measuring galaxy shapes, Jan. 2009
- J. Piel** Mass Determination of Galaxy Clusters with the Weak Gravitational Lens Effect, March 2009
- A. Zien** Shear ratio tomography – computational versus analytical results, June 2009

### (c) Supervision of Ph.D. thesis projects:

- J. Wambsganss** Gravitational Microlensing, August 1990
- M. Bartelmann** Large-scale correlations of cosmological objects due to the gravitational lens effect, October 1992
- H. Erdl** Catastrophe Theory in gravitational lensing, August 1994
- C. Seitz** The determination of the mass distribution in clusters of galaxies by gravitationally distorted images of background galaxies, March 1996
- S. Seitz** Studies of the weak lensing effect on quasars and galaxies, February 1997

- B. Geiger** Constraining the mass distribution of cluster galaxies by weak lensing, October 1998
- G. Kruse** Statistical investigations of the weak cosmological lensing effect, Aug. 1999
- T. Erben** Application of the weak gravitational lens effect, July 2000
- H. Hämmerle** Cosmic shear measurement on small angular scales: The HST/STIS Parallel Survey, Aug. 2002
- M. Kleinheinrich** Dark matter halos of galaxies studied with weak gravitational lensing, June 2003
- M. Schirmer** Weak gravitational lensing: Detection of mass concentrations in wide field imaging data, Feb. 2004
- M. Bradac** Exploring dark matter properties from the smallest to the largest scales, Sept. 2004
- P. Simon** Weak Gravitational Lensing and Galaxy Bias, March 2005
- M. Kilbinger** Cosmological Parameters from Second- and Third-Order Cosmic Shear Statistics, Oct. 2005
- J.P. Dietrich** Combined weak lensing and X-ray search for galaxy clusters and the filaments connecting them, June 2006
- M. Hettterscheidt** Cosmic Shear Analysis of the Garching-Bonn Deep Survey, Dec. 2006
- H. Hildebrandt** Application of photometric redshifts on the correlation properties of galaxies and matter, June 2007
- T. Schrabback** Measuring cosmological weak lensing using the Advanced Camera for Surveys on board the Hubble Space Telescope, Okt. 2007
- J. Pielorz** The non-Gaussian matter power spectrum covariance in the halo model approach, June 2008
- T.F. Eifler** Theoretical Aspects of Cosmic Shear and its Ability to constrain Cosmological Parameters, Dec. 2008
- J. Hartlap** Ray-Tracing Simulations of Weak Gravitational Lensing, Feb. 2009
- J. Rödiger** Studying Galaxy-Galaxy Lensing and Higher-Order Galaxy-Mass Correlations Using the Halo Model, March 2009

## Invited talks at conferences:

- 10/09 “Heirs of Galileo: Frontiers of Astronomy”, Madrid, Spain.
- 10/08 “Dark Energy”, 3rd Biannual Leopoldina Conference, Munich.
- 9/08 “Dark Matter at the Crossroads”, DESY Theory Workshop, Hamburg.
- 2/08 “The dark side of the universe through extragalactic gravitational lensing”, Lorentz Center, Leiden, The Netherlands.
- 10/07 “10th ICATPP Conference on Astroparticle, Particle, Space Physics, Detectors and Medical Physics Applications”, Villa Olmo, Como, Italy
- 9/07 “Spanish Relativity Meeting (Encuentros Relativistas Espanoles)”, Tenerife, Spain
- 7/07 “18th International Conference on General Relativity and Gravitation (GRG18), Sydney, Australia
- 7/07 “From giant arcs to CMB lensing: 20 years of gravitational distortion”, IAP Paris, France
- 11/06 “Towards the European ELT”, Marseille, France
- 9/06 “Applications Of Gravitational Lensing: Unique Insights Into Galaxy Formation And Evolution”, Kavli Institute for Theoretical Physics, Santa Barbara, California
- 2/06 “Dark Energy”, Ringberg Castle, Tegernsee
- 8/05 “COSMO 05: 9th International Workshop on Particle Physics and the Early Universe”, Bonn
- 6/05 “From Simulations to Surveys”, Ringberg Castle, Tegernsee
- 4/05 “IoP2005: Physics, a Century after Einstein”, Warwick, UK
- 3/05 “Seventh International Conference on the History of General Relativity”, Tenerife, Spain
- 12/04 “Gravitational Lensing and its Cosmological Applications”, London, UK
- 10/04 “Baryons in Dark Matter Halos”, Novigrad, Croatia
- 9/04 “DESY Theory Workshop 2004 on Particle Physics and Cosmology”, DESY, Hamburg
- 7/04 “Impact of Gravitational Lensing on Cosmology” IAU Symposium 225, Lausanne, Switzerland
- 3/04 “Outskirts of Galaxy Clusters: Intense Life in the Suburbs”, IAU Colloquium 195, Torino, Italy
- 9/03 “Eighth International Workshop on Topics in Astroparticle and Underground Physics”, Seattle, USA
- 7/03 “Dark Matter in Galaxies”, IAU Symposium 220, Sydney, Australia
- 6/03 “OmegaCAMs First Surveys”, Leiden, The Netherlands
- 5/03 “Satellites and Tidal Streams”, La Palma, Spain
- 1/03 “The search for dark matter and dark energy in the Universe”, London, UK
- 12/02 “21st Texas Symposium on Relativistic Astrophysics”, Florence, Italy
- 7/02 “Gravitational Lenses 2002”, Schloß Ringberg, Tegernsee
- 2/02 “Communicating Astronomy”, La Laguna, Tenerife

- 9/01 “A new era in cosmology”, Durham, UK
- 7/01 “Cosmic Shear Workshop”, Cambridge, UK
- 6/01 “Perspectives in Astro-Particle Physics”, DESY-Zeuthen
- 8/00 “New Cosmological Data and the Values of the Fundamental Parameters”, IAU Symposium 201, Manchester, UK
- 7/00 “DARK 2000”, Heidelberg
- 4/00 “Fundamental Physics in Space and related topics”, CERN
- 2/00 “Symposium für Professor Jürgen Ehlers”, AEI Golm
- 8/99 “Galaxies in the young universe”, Schloß Ringberg, Tegernsee
- 7/99 “Gravitational Lensing: Recent Progress and Future Goals”, Boston, USA
- 4/99 “Perspectives on Radio Astronomy: Scientific Imperatives at cm and m Wavelengths”, Amsterdam, The Netherlands
- 3/99 “VLT Opening Symposium”, Antofagasta, Chile
- 12/98 “19th Texas Symposium on Relativistic Astrophysics”, Paris, France
- 8/98 “Evolution of large-scale structure: From recombination to Garching”, Garching
- 6/98 “The Next Generation Space Telescope: Science Drivers and Technological Challenges”, Liège, Belgium
- 5/98 “Wide-Field Surveys in Cosmology”, 14th IAP Meeting, Paris, France
- 12/97 “Looking Deep in the Southern Sky”, Joint ESO/Australian Conference, Sydney, Australia
- 10/97 “General Relativity and Cosmology”, Kyoto, Japan
- 8/97 “New Trends in Astronomy in the Transition of the Century”, Annual Meeting of the Brazilian Astronomical Society, Angra dos Reis, Brazil
- 6/97 Jodrell-Bank Workshop on “Golden Lenses: The Hubble Constant and galaxies at high redshift”
- 11/96 3rd ESO-VLT Workshop “Galaxy Scaling Relations: Origins, Evolution and Applications”, Garching
- 9/96 “Workshop on Large-Scale Structure”, Schloß Ringberg, Tegernsee
- 8/96 IAU Symposium 179 on “New Horizons from Multi-Wavelength Sky Surveys”, Baltimore, MA
- 8/96 WE-Heraeus-Seminar on “Relativistic Astrophysics”, Bad Honnef
- 7/96 37th Herstmonceux Conference “HST and the high redshift Universe”, Cambridge, UK
- 5/96 Journées Relativistes 96, Ascona, Switzerland
- 4/96 ESO Workshop on “The Early Universe with the VLT”, Garching
- 9/95 Joint 4th European and 39th Italian National Astronomy Meeting “Progress in European Astrophysics”, Catania, Sicily, Italy
- 7/95 IAU Symposium 173 on “Astrophysical Applications of Gravitational Lensing”, Melbourne, Australia
- 6/95 First Annual German–American Frontiers of Science Symposium, Dresden

- 12/94** EARA Workshop “Gravitational Lensing as a Tool in Cosmology”, Paris, France
- 12/94** Workshop “The mass and composition of galaxy clusters”, Garching
- 8/94** IAU Symposium 169 “The Big Bang and Background Radiation”, Den Haag, Holland
- 6/93** “Gravitational Lenses in the Universe”, 31st Liège International Astrophysical Colloquium, Liège, Belgium
- 5/93** “High Energy Astrophysics and Cosmology”, 4th Chinese Academy of Sciences and Max-Planck Society Workshop, Schloß Ringberg, Tegernsee
- 9/92** Aspen Workshop on “Gravitational Lensing”, Aspen, Colorado
- 9/91** “Gravitational Lenses”, Hamburg
- 10/90** “High Energy Astrophysics: Compact Stars and Active Galaxies”, 3rd Chinese Academy of Sciences and Max-Planck Society Workshop, Huangshan, China
- 9/89** “Gravitational Lensing”, Toulouse, France
- 5/89** “Gravitation, magneto-convection and accretion”, Schloß Ringberg, Tegernsee
- 9/87** Meeting of the Astronomische Gesellschaft, Munich
- 10/86** CITA-Workshop on Gravitational Lensing, Toronto, Canada

## List of Publications

Publication with more than 50 citations (according to the Astrophysics Data System, as of Oct. 2008) are marked with a ‘\*’, those with more than 100 with a ‘•’, and those with more than 250 with a ‘••’.

### (a) Monographs and books:

- B1 •• Schneider, P., Ehlers, J. and Falco, E.E.: 1992, “Gravitational Lenses”, a monograph, 560 pages, 103 figures, Astronomy and Astrophysics Library, Springer-Verlag, New York. Second Printing 1999.
- B2 Deutsche Forschungsgemeinschaft, Burkert, A., Genzel, R., Hasinger, G., Morfill, G., Schneider, P. & Koester, D.: 2003, “Status und Perspektiven der Astronomie in Deutschland 2003-2016. Denkschrift” (Decadel Report), Wiley-VCH (Weinheim), XV + 237 pp. + English supplement, 4 pp.
- B3 Schneider, P.: 2005, Einführung in die Extragalaktische Astronomie und Kosmologie, textbook, 452 pages, 444 figures, Springer-Verlag: Berlin.
- B4 Schneider, P., Kochanek, C.S. & Wambsganss, J.: 2006, “Gravitational Lensing: Strong, Weak & Micro”, Saas-Fee Advanced Course 33, Swiss Society for Astrophysics and Astronomy, G. Meylan, P. Jetzer & P. North (Eds.), 552 pages, 196 figures, Springer-Verlag: Berlin.
- B5 Schneider, P.: 2006, “Extragalactic Astronomy and Cosmology. An Introduction”, 459 pages, 447 figures, Springer-Verlag: Berlin.

### (b) Theses:

- T1 Schneider, P.: 1983, “Kohärenz der Bilder von Gravitationslinsen”, Diploma Thesis, Bonn.
- T2 Schneider, P.: 1984, “Verallgemeinerte Gravitationslinsentheorie: Grundlagen, allgemeine Resultate und kosmologische Relevanz”, Ph.D. Thesis, Bonn.
- T3 Schneider, P.: 1991, “Amplification bias in QSO counts”, Habilitationsschrift, Ludwig-Maximilians-Universität, München.

### (c) Papers in refereed journals:

- R1 \* Schneider, P.: 1984, “The amplification caused by gravitational bending of light”, A&A 140, 119-124.
- R2 \* Schneider, P.: 1985, “A new formulation of gravitational lens theory, time-delay and Fermat’s principle”, A&A 143, 413-420.
- R3 Schneider, P. & Schmid-Burgk, J.: 1985, “Mutual coherence of gravitationally lensed images”, A&A 148, 369–378.
- R4 Schneider, P.: 1986, “Statistical gravitational lensing and quasar-galaxy associations”, ApJ 300, L31–L34.
- R5 • Schneider, P. & Weiss, A.: 1986, “The two point mass lens: detailed investigation of a special asymmetric lens”, A&A 164, 237–259.

- R6 \* Ehlers, J. & Schneider, P.: 1986, “Self-consistent probabilities for gravitational lensing in inhomogeneous universes”, *A&A* 168, 57–61.
- R7 • Schneider, P. & Weiss, A.: 1987, “A gravitational lens origin of AGN-variability?”, *A&A* 171, 49–65.
- R8 \* Schneider, P. & Wagoner, R.V.: 1987, “Amplification and polarization of supernovae by gravitational lenses”, *ApJ* 314, 154–175.
- R9 • Kirk, J.G. & Schneider, P.: 1987, “On the acceleration of charged particles at relativistic shock fronts”, *ApJ* 315, 425–433.
- R10 Stocke, J.T., Schneider, P., Morris, S.L., Gioia, I.M., Maccacaro, T. & Schild, R.E.: 1987, “X-ray selected AGNs near bright galaxies”, *ApJ* 315, L11–L15.
- R11 Schneider, P.: 1987, “The amplification bias by gravitational lensing on observed number counts of quasars: effects of a finite source size”, *ApJ* 316, L7–L10.
- R12 Schneider, P.: 1987, “Apparent number density enhancement of quasars near foreground galaxies due to gravitational lensing. I. Amplification cross sections”, *A&A* 179, 71–79.
- R13 Schneider, P.: 1987, “Apparent number density enhancement of quasars near foreground galaxies due to gravitational lensing. II. The amplification probability distribution and results”, *A&A* 179, 80–92.
- R14 Schneider, P.: 1987, “An analytically soluble problem in fully nonlinear statistical gravitational lensing”, *ApJ* 319, 9–13.
- R15 Schneider, P.: 1987, “Statistical gravitational lensing: influence of compact objects on the number counts of quasars”, *A&A* 183, 189–202.
- R16 \* Sikora, M., Kirk, J.G., Begelman, M.C. & Schneider, P.: 1987, “Electron injection by relativistic protons in active galactic nuclei”, *ApJ* 320, L81–L85.
- R17 Kirk, J.G. & Schneider, P.: 1987, “Particle acceleration at shocks: a Monte Carlo method”, *ApJ* 322, 256–265.
- R18 Schneider, P. & Kirk, J.G.: 1987, “Fermi acceleration at shocks with arbitrary velocity profiles”, *ApJ* 323, L87–L90.
- R19 Linder, E.V., Wagoner, R.V. & Schneider, P.: 1988, “Gravitational lensing statistics of amplified supernovae”, *ApJ* 324, 786–793.
- R20 \* Schneider, P. & Weiss, A.: 1988, “Light propagation in inhomogeneous universes”, *ApJ* 327, 526–543.
- R21 Kirk, J.G., Schlickeiser, R. & Schneider, P.: 1988, “Cosmic ray transport in accelerating flows”, *ApJ* 328, 269–274.
- R22 Kirk, J.G. & Schneider, P.: 1988, “The influence of large angle scattering on Fermi acceleration at shocks”, *A&A* 201, 177–188.
- R23 \* Schneider, P. & Weiss, A.: 1988, “Light propagation in inhomogeneous universes: the ray shooting method”, *ApJ* 330, 1–15.
- R24 Linder, E.V. & Schneider, P.: 1988, “Quasar-galaxy associations by gravitational lensing revisited”, *A&A* 204, L8–L10.
- R25 Wambsganss, J., Schneider, P., Giraud, E. & Weiss, A.: 1989, “A gravitational lens explanation for the arc-like structure in C10500–24”, *ApJ* 337, L73–L75.

- R26 Kayser, R., Weiss, A., Refsdal, S. & Schneider, P.: 1989, “Gravitational micro-lensing due to an ensemble of compact objects with different masses”, *A&A* 214, 4–13.
- R27 Schneider, P. & Kirk, J.G.: 1989, “Particle acceleration at modified shock fronts: 1. The power-law spectrum for relativistic flows”, *A&A* 217, 344–350.
- R28 Schneider, P.: 1989, “The number excess of galaxies around high redshift quasars”, *A&A* 221, 221–229.
- R29 Wambsganss, J., Schneider, P., Quirrenbach, A. & Witzel, A.: 1989, “Numerical simulations of scattering in the ISM applied to rapid radiovariability in the quasar 0917+624”, *A&A* 224, L9–L12.
- R30 Kirk, J.G. & Schneider, P.: 1989, “Particle acceleration at modified shock fronts: 2. The problem of injection”, *A&A* 225, 559–568.
- R31 Schneider, P. & Bogdan, T.J.: 1989, “Energetic particle acceleration in spherically symmetric accretion flows: Importance of a momentum dependent diffusion coefficient”, *ApJ* 347, 496–504.
- R32 Narayan, R. & Schneider, P.: 1990, “Why are the Bl Lac objects AO0235+164 and PKS0537–441 not multiply imaged by gravitational lensing?”, *MNRAS* 243, 192–198.
- R33 • Wambsganss, J., Paczynski, B. & Schneider, P.: 1990, “Interpretation of the microlensing event in QSO 2237+0305”, *ApJ* 358, L33–L36.
- R34 \* Schneider, P. & Wambsganss, J.: 1990, “Are the broad emission lines of quasars affected by gravitational microlensing?”, *A&A* 237, 42–53.
- R35 Bartelmann, M. & Schneider, P.: 1990, “Influence of microlensing on quasar statistics”, *A&A* 239, 113–124.
- R36 \* Bogdan, T.J., Lee, M.A. & Schneider, P.: 1991, “Coupled wave damping and stochastic acceleration of pickup ions in the solar wind”, *Journ. Geophys. Res.* A96, 161–178.
- R37 Schneider, P. & Weiss, A.: 1991, “A practical approach to (nearly) elliptical gravitational lens models”, *A&A* 247, 269–275.
- R38 Bartelmann, M. & Schneider, P.: 1991, “Gravitational lensing by large-scale structures”, *A&A* 248, 349–353.
- R39 Falco, E.E., Wambsganss, J. & Schneider, P.: 1991, “The role of microlensing in estimates of the relative time delay for the gravitational images of Q0957+561”, *MNRAS* 251, 698–706.
- R40 Schneider, P.: 1992, “Inversion of the amplification bias and the number excess of foreground galaxies around high-redshift QSOs”, *A&A* 254, 14–24.
- R41 Wambsganss, J., Witt, H.-J. & Schneider, P.: 1992, “Gravitational microlensing: Powerful combination of ray-shooting and parametric representation of caustics”, *A&A* 258, 591–599.
- R42 Bartelmann, M. & Schneider, P.: 1992, “A large-scale structure model for gravitational lensing”, *A&A* 259, 413–422.
- R43 \* Schneider, P. & Weiss, A.: 1992, “The gravitational lens equation near cusps”, *A&A* 260, 1–13.

- R44 Seitz, S. & Schneider, P.: 1992, “Two theorems in multiple deflection gravitational lens theory”, *A&A* 265, 1–8.
- R45 Bartelmann, M. & Schneider, P.: 1993, “Large-scale correlations between QSOs and galaxies. An effect caused by gravitational lensing?”, *A&A* 268, 1–13.
- R46 Erndl, H. & Schneider, P.: 1993, “Classification of the multiple deflection two point-mass gravitational lens models and applications of Catastrophe Theory in Lensing”, *A&A* 268, 453–471.
- R47 Schneider, P.: 1993, “A comment on second-order Fermi acceleration”, *A&A* 269, L13–L15.
- R48 Bartelmann, M. & Schneider, P.: 1993, “Large-scale QSO-galaxy correlations revisited”, *A&A* 271, 421–424.
- R49 Schneider, P.: 1993, “Diffusive particle acceleration by an ensemble of shock waves”, *A&A* 278, 315–327.
- R50 Schneider, P.: 1993, “Upper bounds on the cosmological density of compact objects with sub-solar masses from the variability of QSOs”, *A&A* 279, 1–20.
- R51 Bartelmann, M., Ehlers, J. & Schneider, P.: 1993, “Timescales of isotropic and anisotropic cluster collapse”, *A&A* 280, 351–359.
- R52 \* Bartelmann, M. & Schneider, P.: 1994, “Large-scale correlations between QSOs and IRAS galaxies”, *A&A* 284, 1–11.
- R53 • Kormann, R., Schneider, P. & Bartelmann, M.: 1994, “Isothermal elliptical gravitational lens models”, *A&A* 284, 285–299.
- R54 Kormann, R., Schneider, P. & Bartelmann, M.: 1994, “A gravitational lens model for B1422+231”, *A&A* 286, 357–364.
- R55 Seitz, S. & Schneider, P.: 1994, “Some remarks on multiple deflection gravitational lensing”, *A&A* 287, 349–360.
- R56 Seitz, C. & Schneider, P.: 1994, “Variability of microlensing lightcurves. I. Autocorrelation method and the calculation of the correlated deflection probability”, *A&A* 288, 1–18.
- R57 Seitz, C., Wambsganss, J. & Schneider, P.: 1994, “Variability of microlensing lightcurves. II. Magnification fluctuations, autocorrelation functions, and applications to QSO 2237+0305”, *A&A* 288, 19–29.
- R58 Seitz, S., Schneider, P. & Ehlers, J.: 1994, “Light propagation in arbitrary spacetimes and the gravitational lens approximation”, *Class. Quant. Gravity* 11, 2345–2373.
- R59 Bartelmann, M., Schneider, P. & Hasinger, G.: 1994, “Diffuse X-ray emission around high-redshift, radio-loud QSOs”, *A&A* 290, 399–411.
- R60 • Schneider, P. & Seitz, C.: 1995, “Steps towards nonlinear cluster inversion through gravitational distortions. I. Basic considerations and circular clusters”, *A&A* 294, 411–431.
- R61 Schneider, P. & Bartelmann, M.: 1995, “The power spectrum of density fluctuations in the Zel’dovich approximation”, *MNRAS* 273, 475–483.

- R62 \* Seitz, C. & Schneider, P.: 1995, “Steps towards nonlinear cluster inversion through gravitational distortions. II. Generalization of the Kaiser & Squires method”, *A&A* 297, 287–299.
- R63 Seitz, S. & Schneider, P.: 1995, “The density of 1-Jansky sources around Zwicky clusters”, *A&A* 302, 9–20.
- R64 Schneider, P.: 1995, “Cluster lens reconstruction using only observed local data”, *A&A* 302, 639–648.
- R65 \* Seitz, S. & Schneider, P.: 1996, “Cluster lens reconstruction using only observed local data – an improved finite-field inversion technique”, *A&A* 305, 383–401.
- R66 \* Bartelmann, M., Narayan, R., Seitz, S. & Schneider, P.: 1996, “Maximum-likelihood cluster reconstruction”, *ApJ* 464, L115–L118.
- R67 Patnaik, A., Schneider, P. & Narayan, R.: 1996, “Deep radio observation of the gravitational lens candidate QSO2345+007”, *MNRAS* 281, L17–L20.
- R68 Geiger, B. & Schneider, P.: 1996, “The light-curve reconstruction method for measuring the time delay of gravitational lens systems”, *MNRAS* 282, 530–546.
- R69 \* Seitz, C., Kneib, J.-P., Schneider, P. & Seitz, S.: 1996, “The mass distribution of CL0939+4713 obtained from a ‘weak’ lensing analysis”, *A&A* 314, 707–720.
- R70 • Schneider, P.: 1996, “Detection of (dark) matter concentrations via weak gravitational lensing”, *MNRAS* 283, 837–853.
- R71 Schneider, P.: 1996, “Cosmological dark matter as seen with gravitational lensing”, *Helvetica Physica Acta* 69, 373–387.
- R72 Van Waerbeke, L., Mellier, Y., Schneider, P., Fort, B. & Mathez, G.: 1997, “The auto-correlation function of the extragalactic background light. I. Measuring gravitational shear”, *A&A* 317, 303–317.
- R73 Schneider, P. & Rix, H.-W.: 1997, “Quantitative analysis of galaxy-galaxy lensing”, *ApJ* 474, 25–36.
- R74 \* Seitz, C. & Schneider, P.: 1997, “Steps towards nonlinear cluster inversion through gravitational distortions. III. Including a redshift distribution of the sources”, *A&A* 318, 687–699.
- R75 Bartsch, A., Schneider, P. & Bartelmann, M.: 1997, “Reanalysis of the association of high-redshift 1-Jansky quasars with IRAS galaxies”, *A&A* 319, 375–393.
- R76 Burbidge, G., Hoyle, F. & Schneider, P.: 1997, “Very close pairs of Quasi-Stellar Objects”, *A&A* 320, 8–12.
- R77 Schneider, P. & Bartelmann, M.: 1997, “Aperture multipole moments from weak gravitational lensing”, *MNRAS* 286, 696–708.
- R78 Schneider, P.: 1997, “The cosmological lens equation and the equivalent single-plane gravitational lens”, *MNRAS* 292, 673–678.
- R79 Geiger, B. & Schneider, P.: 1998, “Constraining the mass distribution of cluster galaxies by weak lensing”, *MNRAS* 295, 497–510.
- R80 • Mao, S. & Schneider, P.: 1998, “Evidence for substructure in lens galaxies?”, *MNRAS* 295, 587–594.

- R81 Schneider, P., van Waerbeke, L., Mellier, Y., Jain, B., Seitz, S. & Fort, B.: 1998, “Detection of shear due to weak lensing by large-scale structure”, *A&A* 333, 767–778.
- R82 Schneider, P.: 1998, “Cosmic shear and biasing”, *ApJ* 498, 43–47.
- R83 • Schneider, P., van Waerbeke, L., Jain, B. & Kruse, G.: 1998, “A new measure for cosmic shear”, *MNRAS* 296, 873–892.
- R84 Seitz, S., Schneider, P. & Bartelmann, M.: 1998, “Entropy regularized maximum-likelihood cluster mass reconstruction”, *A&A* 337, 325–337.
- R85 Geiger, B. & Schneider, P.: 1999, “A simultaneous maximum likelihood approach for galaxy-galaxy lensing and cluster lens reconstruction”, *MNRAS*, 302, 118–130.
- R86 Kruse, G. & Schneider, P.: 1999, “Statistics of dark matter haloes expected from weak lensing surveys”, *MNRAS* 302, 821–829.
- R87 Kraus, A., Quirrenbach, A., Lobanov, A., Krichbaum, T.P., Risse, M., Schneider, P., Qian, S.J., Wagner, S.J., Witzel, A., Zensus, J.A., Heidt, J., Bock, H., Aller, M. & Aller, H.: 1999, “Unusual radio variability in the BL Lac object 0235+164”, *A&A* 344, 807–816.
- R88 Bartelmann, M. & Schneider, P.: 1999, “Power spectrum from weak-shear data”, *A&A* 345, 17–21.
- R89 Reblinsky, K., Kruse, G., Jain, B. & Schneider, P.: 1999, “Cosmic shear and halo abundances: Analytical versus numerical results”, *A&A* 351, 815–826.
- R90 Schneider, P., King, L. & Erben, T.: 2000, “Cluster mass profiles from weak lensing: constraints from shear and magnification information”, *A&A* 353, 41–56.
- R91 \* Erben, T., van Waerbeke, L., Mellier, Y., Schneider, P., Cuillandre, J.C., Castander, F.J. & Dantel-Fort, M.: 2000, “Mass-detection of a matter concentration projected near the cluster Abell 1942: Dark clump or high-redshift cluster?”, *A&A* 355, 23–36.
- R92 •• Van Waerbeke, L., Mellier, Y., Erben, T., Cuillandre, J.C., Bernardeau, F., Maoli, R., Bertin, E., Mc Cracken, H.J., Le Fèvre, O., Fort, B., Dantel-Fort, M., Jain, B. & Schneider, P.: 2000, “Detection of correlated galaxy ellipticities on CFHT data: First evidence for gravitational lensing by Large Scale Structures”, *A&A* 358, 30–44.
- R93 Kruse, G. & Schneider, P.: 2000, “The non-Gaussian tail of cosmic-shear statistics”, *MNRAS* 318, 321–328.
- R94 •• Bartelmann, M. & Schneider, P.: 2001, “Weak gravitational lensing”, *Physics Reports* 340, 291–472.
- R95 • Erben, T., van Waerbeke, L., Bertin, E., Mellier, Y. & Schneider, P.: 2001, “How accurately can we measure Weak Gravitational Shear?”, *A&A* 366, 717–735.
- R96 • Maoli, R., van Waerbeke, L., Mellier, Y., Schneider, P., Jain, B., Bernardeau, F., Erben, T. & Fort, B.: 2001, “Cosmic shear analysis in 50 uncorrelated VLT fields. Implications for  $\Omega_0$ ,  $\sigma_8$ ”, *A&A* 368, 766–775.
- R97 King, L. & Schneider, P.: 2001, “Cluster mass profiles from weak lensing II”, *A&A* 369, 1–15.
- R98 Lombardi, M. & Schneider, P.: 2001, “Smooth maps from clumpy data”, *A&A* 373, 359–368.

- R99 Seitz, S. & Schneider, P.: 2001, “A new finite-field mass reconstruction algorithm”, *A&A* 374, 740–745.
- R100 • van Waerbeke, L., Mellier, Y., Radovich, M., Bertin, E., Dantel-Fort, M., Mc Cracken, H.J., Le Fèvre, O., Foucaud, S., Cuillandre, J.C., Erben, T., Jain, B., Schneider, P., Bernardeau, F. & Fort, B.: 2001, “Cosmic shear statistics and cosmology”, *A&A* 374, 757–769.
- R101 Pirzkal, N., Collodel, L., Erben, T., Fosbury, R.A.E., Freudling, W., Hämmerle, H., Jain, B., Micol, A., Miralles, J.-M., Schneider, P., Seitz, S. & White, S.D.M.: 2001, “Cosmic shear from STIS Pure Parallels: I Data”, *A&A* 375, 351–358.
- R102 Bartelmann, M., King, L.J. & Schneider, P.: 2001, “Weak-lensing halo numbers and dark-matter profiles”, *A&A* 378, 361–369.
- R103 King, L., Schneider, P. & Springel, V.: 2001, “Cluster mass profiles from weak lensing: the influence of substructure”, *A&A*, 378, 748–755.
- R104 \* Clowe, D. & Schneider, P.: 2001, “Wide field weak lensing observations of A1689”, *A&A* 379, 384–392.
- R105 King, L.J., Clowe, D.I. & Schneider, P.: 2002, “Parameterized models for the lensing cluster Abell 1689”, *A&A* 383, 118–124.
- R106 Lombardi, M., Schneider, P. & Morales-Merino, C.: 2002, “The noise of cluster mass reconstructions from a source redshift distribution”, *A&A* 382, 769–786.
- R107 Hämmerle, H., Miralles, J.-M., Schneider, P., Erben, T., Fosbury, R.A.E., Freudling, W., Pirzkal, N., Jain, B. & White, S.D.M.: 2002, “Cosmic shear from STIS Pure Parallels. II. Analysis”, *A&A* 385, 743–760.
- R108 King, L.J., Clowe, D.I., Lidman, C., Schneider, P., Erben, T., Kneib, J.-P. & Meylan, G.: 2002, “The first detection of weak gravitational shear in infrared observations: Abell 1689”, *A&A* 385, L5–L9.
- R109 Miralles, J.-M., Erben, T., Hämmerle, H., Schneider, P., Fosbury, R.A.E., Freudling, W., Pirzkal, N., Jain, B. & White, S.D.M.: 2002, “A conspicuous tangential alignment of galaxies in a STIS Parallel Shear Survey field: A new dark-lens candidate?”, *A&A* 388, 68–73.
- R110 \* Bradac, M., Schneider, P., Steinmetz, M., Lombardi, M., King, L.J. & Porcas, R.: 2002, “B1422+231: The influence of mass substructure on strong lensing”, *A&A* 388, 373–382.
- R111 \* Schneider, P., van Waerbeke, L. & Mellier, Y.: 2002, “B-modes in cosmic shear from source redshift clustering”, *A&A* 389, 729–741.
- R112 Lombardi, M. & Schneider, P.: 2002, “Smooth maps from clumpy data: Covariance analysis”, *A&A* 392, 1153–1174.
- R113 Clowe, D. & Schneider, P.: 2002, “Wide field weak lensing observations of A1835 and A2204”, *A&A* 395, 385–397.
- R114 \* Schneider, P., van Waerbeke, L., Kilbinger, M. & Mellier, Y.: 2002, “Analysis of two-point statistics of cosmic shear: I. Estimators and covariances”, *A&A* 396, 1–19.
- R115 King, L. & Schneider, P.: 2002, “Suppressing the contribution of intrinsic alignments to the shear two-point correlation function”, *A&A* 396, 411–418.

- R116 Schneider, P. & Lombardi, M.: 2003, “The three-point correlation function of cosmic shear: I. The natural components”, *A&A* 397, 809–818.
- R117 King, L. & Schneider, P.: 2003, “Separating cosmic shear from intrinsic galaxy alignments: correlation function tomography”, *A&A* 398, 23–30.
- R118 Lombardi, M. & Schneider, P.: 2003, “Smooth maps from clumpy data: Generalization”, *A&A* 407, 385–392.
- R119 Schirmer, M., Erben, T., Schneider, P., Pietrzynski, G., Gieren, W., Carpano, S, Micol, A. & Pierfederici, F.: 2003, “GaBoDS: The Garching-Bonn Deep Survey – I. Anatomy of galaxy clusters in the background of NGC 300”, *A&A* 407, 869–888.
- R120 Schneider, P.: 2003, “The consequences of parity symmetry for higher-order statistics of cosmic shear and other polar fields”, *A&A* 408, 829–834.
- R121 Erben, T., Miralles, J.M., Clowe, D., Schirmer, M., Schneider, P., Freudling, W., Fosbury, R.A.E. & Jain, B.: 2003, “A weak lensing analysis of a STIS dark-lens candidate”, *A&A* 410, 45–52.
- R122 Kilbinger, M. & Schneider, P.: 2004, “Analysis of two-point statistics of cosmic shear: II. Optimizing the survey geometry”, *A&A* 413, 465–476.
- R123 Simon, P., King, L.J. & Schneider, P.: 2004, “The covariance of cosmic shear correlation functions and cosmological parameter estimates using redshift information”, *A&A* 417, 873–885.
- R124 Schirmer, M., Erben, T., Schneider, P., Wolf, C. & Meisenheimer, K.: 2004, “GaBoDS: The Garching-Bonn Deep Survey – II. Confirmation of EIS cluster candidates by weak gravitational lensing”, *A&A* 420, 75–78.
- R125 Bertout, C. & Schneider, P.: 2004, “Editorship and peer-review at *A&A*”, *A&A* 420, E1–E14.
- R126 Bradac, M., Schneider, P., Lombardi, M., Steinmetz, M., Koopmans, L.V.E. & Navarro, J.F.: 2004, “The signature of substructure on gravitational lensing in the  $\Lambda$ CDM cosmological model”, *A&A* 423, 797–809.
- R127 Bradac, M., Lombardi, M. & Schneider, P.: 2004, “Mass-sheet degeneracy: Fundamental limit on the cluster mass reconstruction from statistical (weak) lensing”, *A&A* 424, 13–22.
- R128 Schneider, P., Kilbinger, M. & Lombardi, M.: 2005, “The three-point correlation function of cosmic shear. II: Relation to the bispectrum of the projected mass density and generalized third-order aperture measures”, *A&A* 431, 9–25.
- R129 Schneider, P. & Watts, P.: 2005, “Galaxy-galaxy-galaxy lensing: Third-order correlations between the galaxy and mass distributions in the Universe”, *A&A* 432, 783–795.
- R130 Miralles, J.-M., Erben, T., Haemmerle, H., Schneider, P., Freudling, W., Pirzkal, N. & Fosbury, R.A.E.: 2005, “Cosmic Shear from STIS pure parallels: III. Analysis of Cycle 9 pure parallels”, *A&A* 432, 797–808.
- R131 Erben, T., Schirmer, M., Dietrich, J.P., Cordes, O., Habertzettl, L., Hetterscheidt, M., Hildebrandt, H., Schmithuesen, O., Schneider, P., Simon, P., Deul, E., Hook, R.N., Kaiser, N., Radovich, M., Benoist, C., Nonino, M., Olsen, L.F., Prandoni, I., Wichmann, R., Zaggia, S., Bomans, D., Dettmar, R.-J. & Miralles, J.-M.: 2005, “GaBoDS:

- The Garching-Bonn Deep Survey: IV. Methods for the image reduction of multi-chip Cameras demonstrated on data from the ESO Wide-Field Imager”, AN 326, 432–464.
- R132 Bradac, M., Schneider, P., Lombardi, M. & Erben, T.: 2005, “Strong and weak lensing united. I. The combined strong and weak lensing cluster mass reconstruction method”, A&A 437, 39–48.
- R133 Bradac, M., Erben, T., Schneider, P., Hildebrandt, H., Lombardi, M., Schirmer, M., Miralles, J.-M., Clowe, D. & Schindler, S.: 2005, “Strong and weak lensing united. II. The cluster mass distribution of the most X-ray luminous cluster RX J1347.5–1145”, A&A 437, 49–60.
- R134 Kleinheinrich, M., Rix, H.-W., Erben, T., Schneider, P., Wolf, C., Schirmer, M., Meisenheimer, K., Borch, A., Dye, S., Kovacs, Z. & Wisotzki, L.: 2005, “The influence of redshift information on galaxy-galaxy lensing measurements”, A&A 439, 513–520.
- R135 Dietrich, J.P., Schneider, P., Clowe, D., Romano-Diaz, E. & Kerp, J.: 2005, “Weak lensing evidence for a filament between the clusters A 222 and A 223 and its quantification”, A&A 440, 453–471.
- R136 Hildebrandt, H., Bomans, D.J., Erben, T., Schneider, P., Schirmer, M., Czoske, O., Dietrich, J.P., Schrabback, T., Simon, P., Dettmar, R.J., Habertzettl, L., Hettterscheidt, M. & Cordes, O.: 2005, “GaBoDS: The Garching-Bonn Deep Survey. III. Lyman-Break-Galaxies in the Chandra Deep Field South”, A&A 441, 905–914.
- R137 Hettterscheidt, M., Erben, T., Schneider, P., Maoli, R., van Waerbeke, L. & Mellier, Y.: 2005, “Searching for galaxy clusters using the aperture mass statistics in 50 VLT fields”, A&A 442, 43–61.
- R138 Kilbinger, M. & Schneider, P.: 2005, “Cosmological parameters from combined second- and third-order aperture mass statistics of cosmic shear”, A&A 442, 69–83.
- R139 White, S.D.M., Clowe, D.I., Simard, L., Rudnick, G., De Lucia, G., Aragon-Salamanca, A., Bender, R., Best, P., Bremer, M., Charlot, S., Dalcanton, J., Dantel, M., Desai, V., Fort, B., Halliday, C., Jablonka, P., Kauffmann, G., Mellier, Y., Milvang-Jensen, B., Pello, R., Poggianti, B., Poirier, S., Rottgering, H., Saglia, R., Schneider, P. & Zaritsky, D.: 2005, “EDisCS – the ESO Distant Cluster Survey. Sample definition and optical photometry”, A&A 444, 365–379.
- R140 Clowe, D., Schneider, P., Aragon-Salamanca, A., Bremer, M., De Lucia, G., Halliday, C., Jablonka, P., Milvang-Jensen, B., Pello, R., Poggianti, B., Rudnick, G., Saglia, R., Simard, L., White, S. & Zaritsky, D.: 2006, “Weak lensing mass reconstructions of the ESO Distant Cluster Survey”, A&A 451, 395–408, plus 22 p. online material.
- R141 Hildebrandt, H., Erben, T., Dietrich, J.P., Cordes, O., Habertzettl, L., Hettterscheidt, M., Schirmer, M., Schmithuesen, O., Schneider, P., Simon, P. & Trachternach, C.: 2006, “GaBoDS: The Garching-Bonn Deep Survey V. Data release of the ESO Deep-Public-Survey”, A&A, 452, 1121–1128.
- R142 von der Linden, A., Erben, T., Schneider, P. & Castander, F.J.: 2006, “The dark clump near Abell 1942: dark matter halo or statistical fluke?”, A&A 454, 37–53, plus 13 p. online material.

- R143 Kleinheinrich, M., Schneider, P., Rix, H.-W., Erben, T., Wolf, C., Schirmer, M., Meisenheimer, K., Borch, A., Dye, S., Kovacs, Z. & Wisotzki, L.: 2006, “Weak lensing measurements of dark matter halos of galaxies from COMBO-17”, *A&A* 455, 441–451.
- R144 Kilbinger, M., Schneider, P. & Eifler, T.: 2006: “E- and B-mode mixing from incomplete knowledge of the shear correlation”, *A&A* 457, 15–19.
- R145 Simon, P., Hettterscheidt, M., Schirmer, M., Erben, T., Schneider, P., Wolf, C. & Meisenheimer, K.: 2007, “GaBoDS: The Garching-Bonn Deep Survey. VII. Probing galaxy bias using weak gravitational lensing”, *A&A* 461, 861–879.
- R146 Schneider, P. & Kilbinger, M.: 2007, “The ring statistics – how to separate E- and B-modes of cosmic shear correlation functions on a finite interval”, *A&A* 462, 841–849.
- R147 Hildebrandt, H., Pielorz, J., Erben, T., Schneider, P., Eifler, T., Simon, P. & Dietrich, J.P.: 2007, “GaBoDS: The Garching-Bonn Deep Survey. VIII. Lyman-break galaxies in the ESO Deep Public Survey”, *A&A* 462, 865–873.
- R148 Schirmer, M., Erben, T., Hettterscheidt, M. & Schneider, P.: 2007, “GaBoDS: The Garching-Bonn Deep Survey – IX. A sample of 158 shear-selected mass concentration candidates”, *A&A* 462, 875–887.
- R149 Hartlap, J., Simon, P. & Schneider, P.: 2007, “Why your model parameter confidences might be too optimistic. Unbiased estimation of the inverse covariance matrix”, *A&A* 464, 399–404.
- R150 Schrabback, T., Erben, T., Simon, P., Miralles, J.-M., Schneider, P., Heymans, C., Eifler, T., Fosbury, R.A.E., Freudling, W., Hettterscheidt, M., Hildebrandt, H. & Pirzkal, N.: 2007, “Cosmic shear analysis of archival HST/ACS data. I. Comparison of early ACS pure parallel data to the HST/GEMS Survey”, *A&A* 468, 823–847.
- R151 Hettterscheidt, M., Simon, P., Schirmer, M., Hildebrandt, H., Schrabback, T., Erben, T. & Schneider, P.: 2007, “GaBoDS: The Garching-Bonn Deep Survey. VII. Cosmic shear analysis”, *A&A* 468, 859–876.
- R152 Dietrich, J.P., Erben, T., Lamer, G., Schneider, P., Schwobe, A., Hartlap, J. & Maturi, M.: 2007, “BLOX: the Bonn lensing, optical, and X-ray selected galaxy clusters. I. Cluster catalog construction”, *A&A* 470, 821–834.
- R153 Hilbert, S., White, S.D.M., Hartlap, J. & Schneider, P.: 2007, “Strong lensing optical depths in a  $\Lambda$ CDM universe”, *MNRAS* 382, 121–132.
- R154 Joachimi, B., Schneider, P. & Eifler, T.: 2008, “Analysis of two-point statistics of cosmic shear: III. Covariances of shear measures made easy”, *A&A* 477, 43–54.
- R155 Simon, P., Watts, P., Schneider, P., Hoekstra, H., Gladders, M.D., Yee, H.K.C., Hsieh, B.C. & Lin, H.: 2008, “First detection of galaxy-galaxy-galaxy lensing in RCS – a new tool for studying the matter environment of galaxy pairs”, *A&A* 479, 655–667.
- R156 Halkola, A., Hildebrandt, H., Schrabback, T., Lombardi, M., Bradac, M., Erben, T., Schneider, P. & Wuttke, D.: 2008, “The mass distribution of RX J1347–1145 from strong lensing”, *A&A* 481, 65–77.
- R157 Eifler, T., Kilbinger, M. & Schneider, P.: 2008, “Comparing cosmic shear measures. Optimizing the information content of cosmic shear data vectors”, *A&A* 482, 9–19.

- R158 Hilbert, S., White, S.D.M., Hartlap, J. & Schneider, P.: 2008, “Strong lensing optical depths in a  $\Lambda$ CDM universe II: the influence of the stellar mass in galaxies”, *MNRAS* 386, 1845–1854.
- R159 Schneider, P. & Er, X.: 2008, “Weak lensing goes bananas: What flexion really measures”, *A&A* 485, 363–376.
- R160 Bradac, M., Schrabback, T., Erben, T., McCourt, M., Million, E., Mantz, A., Allen, S., Blandford, R., Halkola, A., Hildebrandt, H., Lombardi, M., Marshall, P., Schneider, P., Treu, T. & Kneib, J.-P.: 2008, “Dark matter and baryons in the X-ray luminous merging galaxy cluster RX J1347.5–1145”, *ApJ* 681, 187–196.
- R161 Semboloni, E., Heymans, C., van Waerbeke, L. & Schneider, P.: 2008, “Sources of contamination to weak lensing three-point statistics: constraints from N-body simulations”, *MNRAS* 388, 991–1000.
- R162 Joachimi, B. & Schneider, P.: 2008, “The removal of shear-ellipticity correlations from the cosmic shear signal via nulling techniques”, *A&A* 488, 829–843.
- R163 Erben, T., Hildebrandt, H., Lerchster, M., Hudelot, P., Benjamin, J., van Waerbeke, L., Schrabback, T., Brimiouille, F., Cordes, O., Dietrich, J.P., Holhjem, K., Schirmer, M. & Schneider, P.: 2009, “CARS: The CFHTLS-Archive-Research Survey. I. Five-band multi-colour data from 37 sq. deg. CFHTLS-Wide observations”, *A&A* 493, 1197–1222.
- R164 Refregier, A., Douspis, M., Mellier, Y., Milliard, B., Schneider, P., Rix, H.-W., Bender, R. et al.: 2009, “The Dark UNiverse Explorer (DUNE): Proposal to ESA’s Cosmic Vision”, *Experimental Astronomy* 23, 17–37.
- R165 Hilbert, S., Hartlap, J., White, S.D.M. & Schneider, P.: 2009, “Ray-tracing through the Millennium Simulation: Born corrections and lens-lens coupling in cosmic shear and galaxy-galaxy lensing”, *A&A* 499, 31–43.
- R166 Eifler, T., Schneider, P. & Hartlap, J.: 2009, “Dependence of cosmic shear covariances on cosmology. Impact on parameter estimation”, *A&A* 502, 721–731.
- R167 Simon, P., Hettterscheidt, M., Wolf, C., Meisenheimer, K., Hildebrandt, H., Schneider, P., Schirmer, M. & Erben, T.: 2009, “Relative clustering and the joint halo occupation distribution of red sequence and blue-cloud galaxies in COMBO-17”, *MNRAS* 398, 807–831.
- R168 Schneider, P. & Hartlap, J.: 2009, “Constrained correlation functions”, *A&A* 504, 705–717.
- R169 Hartlap, J., Schrabback, T., Simon, P. & Schneider, P.: 2009, “The non-Gaussianity of the cosmic shear likelihood or how odd is the Chandra Deep Field South?”, *A&A* 504, 689–703.
- R170 Bradac, M., Treu, T., Applegate, D., Gonzalez, A.H., Clowe, D., Forman, W., Jones, C., Marshall, P., Schneider, P. & Zaritsky, D.: 2009, “Focusing cosmic telescope: Exploring redshifts  $z \sim 5 - 6$  galaxies with the bullet cluster 1E0657–56”, *ApJ* 706, 1201–1212.
- R171 Joachimi, B. & Schneider, P.: 2009, “The removal of shear-ellipticity correlations from the cosmic shear signal: Influence of photometric redshift errors on the nulling technique”, *A&A* 507, 105–129.

- R172 Pielorz, J., Rödiger, J., Tereno, I. & Schneider, P.: 2009, “A fitting formula for the non-Gaussian contribution to the lensing power spectrum covariance”, A&A submitted (also arXiv:0907.1524).
- R173 Eifler, T., Schneider, P. & Krause, E.: 2009, “Measuring cosmic shear with the ring statistics”, A&A submitted (also arXiv:0907.2320).
- R174 Joachimi, B., Shi, X. & Schneider, P.: 2009, “Bispectrum covariance in the flat-sky limit”, A&A in press (arXiv:0907.2901).
- R175 Schrabback, T., Hartlap, J., Joachimi, B., Kilbinger, M., Simon, P., Benabed, K., Bradač, B., Eifler, T., Erben, T., Fassnacht, C.D., High, F.W., Hilbert, S., Hildebrandt, H., Hoekstra, H., Kuijken, K., Marshall, P., Mellier, Y., Morganson, E., Schneider, P., Semboloni, E., Van Waerbeke, L. & Velander, M.: 2009, “Evidence for the accelerated expansion of the Universe from weak lensing tomography with COSMOS”, A&A submitted (also arXiv:0911.0053).
- R176 Israel, H., Erben, T., Reiprich, T.H., Vikhlinin, A., Hildebrandt, H., Hudson, D.S., McLeod, B.A., Sarazin, C.L., Schneider, P. & Zhang, Y.-Y.: 2009, “The 400d Galaxy Cluster Survey Weak Lensing Programme: I: MMT/Megacam Analysis of CL0030+2618 at  $z = 0.50$ ”, A&A submitted (also arXiv:0911.3111).

#### (d) Other publications:

- O1 Schneider, P.: 1983, “The mutual coherence of the images of gravitationally lensed objects”, in: *Quasars and gravitational lenses*, ed. by J.P.Swings, Liège 1983.
- O2 Schneider, P.: 1985, “Amplification caused by gravitational bending of light”, in: *Active galactic nuclei*, ed. by J.E.Dyson, Manchester University Press.
- O3 Kirk, J.G, and Schneider, P.: 1987, “Cosmic ray acceleration at relativistic shocks”, in: *Supermassive black holes*, ed. by M.Kafatos.
- O4 Schneider, P.: 1988, “Remarks on gravitational microlensing”, *Mitt. Astr. Ges.* **70**, 219.
- O5 Schneider, P.: 1989, “A viable explanation for quasar galaxy associations?”, in: *Gravitational Lenses*, ed. by: Moran, J.M., Hewitt, J.N., and Lo, K.Y., p.216-221 (Springer Verlag).
- O6 Giraud, E., Schneider, P. and Wambsganss, J.: 1989, “The arc in Cl 0500-24”, *ESO Messenger*, **56**, 62.
- O7 Lee, M.A., Bogdan, T.J., and Schneider, P.: 1990, “Coupled stochastic Fermi acceleration and wave damping in Space Plasmas”, in: *21st Cosmic Ray Conference, Adelaide 1990*, Volume 5, p. 348-351.
- O8 Schneider, P.: 1989, “Gravitational lensing and active galactic nuclei”, in: *Gravitation, magneto-convection and accretion*, ed. by B. Schmidt, H.-U. Schmidt, and H.-C. Thomas, p.88, Garching 1989.
- O9 Schneider, P.: 1989, “Gravitational lensing and light propagation in an inhomogeneous universe”, in: *Cosmology and Gravitational Lensing*, ed. by: G. Börner, T. Buchert, and P. Schneider, MPA-P3 (proceedings, Garching 1989).
- O10 Schneider, P.: 1990, “Microlensing”, in: *Gravitational Lensing*, ed. by Y. Mellier, B. Fort, and G. Soucail, p. 175-185 (Lecture Notes in Physics, Springer).

- O11 Schneider, P.: 1991, “Recent result in gravitational lensing”, in: *High Energy Astrophysics: Compact Stars and Active Galaxies*, Li Qibin (Ed.), World Scientific, p. 192-202.
- O12 Schneider, P.: 1992, “Gravitational lensing statistics”, in: *Gravitational lenses*, R. Kayser, T. Schramm, L. Nieser (eds.), Springer-Verlag, p.196-208.
- O13 Ehlers, J. and Schneider, P.: 1992, “Gravitational lensing”, in: *Relativistic gravity research*, J. Ehlers and G. Schäfer (eds.), Springer-Verlag, p. 1-45.
- O14 Ehlers, J. and Schneider, P.: 1993, “Gravitational lensing”, in: *General Relativity and Gravitation*, Proc. of the Thirteenth International Conference on General Relativity and Gravitation, Cordoba, Argentina, Eds. R.J. Gleiser, C.N. Kozameh, O.M. Moreschi, Institute of Physics Publishing, Bristol 1993, p. 21-40.
- O15 Schneider, P.: 1994, “Unsolved puzzles with gravitational lenses”, in: *Gravitational Lenses in the Universe*, J. Surdej, D. Fraipont–Caro, E. Gosset, S. Refsdal & M. Remy (eds.), Proceedings of the 31st Liège International Astrophysical Colloquium, Liège, p. 41-51.
- O16 Schneider, P.: 1994, “Concluding remarks”, in: *Gravitational Lenses in the Universe*, J. Surdej, D. Fraipont–Caro, E. Gosset, S. Refsdal & M. Remy (eds.), Proceedings of the 31st Liège International Astrophysical Colloquium, Liège, p. 657-669
- O17 Schneider, P.: 1994, “Constraints on compact objects from gravitational lensing”, in: *Proceedings of the 4th MPG-CAS Workshop in High Energy Astrophysics and Cosmology*, G. Börner & T. Buchert (eds.) MPA/P8, Garching, p. 229-235.
- O18 Schneider, P.: 1996, “Cosmological applications of gravitational lensing”, in: *Examining the Big Bang and Diffuse Background Radiations*, IAU Symposium 168, eds. M. Kafatos & Y. Kondo, p. 209-217.
- O19 Schneider, P.: 1996, “The reconstruction of cluster mass profiles from image distortions”, in: *Astrophysical applications of gravitational lensing*, IAU Symposium 173, eds. C.S. Kochanek, J.N. Hewitt, Kluwer, p. 137-142.
- O20 Schneider, P.: 1996, “Cosmological applications of gravitational lensing”, in: *The universe at high-z, large-scale structure and the cosmic microwave background*, Proceedings of an advanced summer school, Laredo, Cantabria, Spain, eds. E. Martínez-Gonzales and J.L. Sanz, Lecture Notes in Physics 470, Springer-Verlag, p. 148-173.
- O21 Schneider, P.: 1997, “Dark matter searches with weak gravitational lensing”, in: *The Early Universe with the VLT*, ESO Workshop, ed. J. Bergeron, ESO Astrophysics Symposia, Springer-Verlag, p. 250–257.
- O22 Schneider, P.: 1997, “Weak gravitational lensing”, in: *HST and the high-redshift Universe*, Proc. of the 37th Herstmonceux Conference, eds. N.R. Tanvir, A. Aragón-Salamanca & J.V. Wall, p. 245-252.
- O23 Schneider, P.: 1998, “Weak gravitational lensing – the need for surveys”, in: *New horizons from multi-wavelength sky surveys*, IAU Symposium 179, eds. B.J. McLean, D.A. Golombek, J.J.E. Hayes & H.E. Payne, Kluwer, p.241-248.
- O24 Schneider, P.: 1998, “Dark halo scaling from galaxy-galaxy lensing”, ESO Workshop on ‘Galaxy Scaling Relations: Origins, Evolution and Applications’, eds. L.N. da Costa & A. Renzini, Springer-Verlag, p.64-72.

- O25 Schneider, P.: 1998, “Cosmological dark matter as seen with weak gravitational lensing”, Proceedings of Heraeus Workshop on Relativistic Astrophysics, eds. H. Riffert, H. Ruder, H.-P. Nollert & F.W. Hehl, Vieweg, p.16-32.
- O26 Biggs, A.D., Browne, I.W.A., Wilkinson, P.N., Nair, S., Patnaik, A.R., Perley, R.A., Schneider, P. & Geiger, B.: 1997, “A new determination of the time delay in 0218+357”, in: *Golden Lenses*, Proceeding of a conference held at Jodrell Bank, June 23-25, 1997.
- O27 Mao, S. & Schneider, P.: 1997, “Evidence for substructure in lens galaxies?”, in: *Golden Lenses*, Proceeding of a conference held at Jodrell Bank, June 23-25, 1997.
- O28 Schneider, P.: 1997, “Cosmic shear in strong lensing events and the equivalent single-plane lens”, in: *Golden Lenses*, Proceeding of a conference held at Jodrell Bank, June 23-25, 1997.
- O29 Schneider, P.: 1998, “Mapping the dark matter with weak gravitational lensing”, in: *Looking Deep in the Southern Sky*, Proceedings of the ESO/ATNF Workshop, Sydney 1997, eds. R. Morganti and W. Couch, Springer-Verlag 1998, p.51-58.
- O30 Quirrenbach, A., Kraus, A., Lobanov, A., Krichbaum, T.P., Witzel, A., Schneider, P., Wagner, S.J., Heidt, J., Bock, H., Aller, M. & Aller, H.: 1998, “Rapid Variability in the BL Lacertae Object AO 0235+164”, Bull. AAS 192, no.36.03.
- O31 Kraus, A., Quirrenbach, A., Lobanov, A., Krichbaum, T.P., Schneider, P., Wagner, S.J., Heidt, J., Bock, H., Witzel, A., Aller, M. & Aller, H.: 1998, “Unusual radio variability in the BL Lac object 0235+164”, in: “BL Lac Phenomenon”, Conference in Turku, Finland.
- O32 Schneider, P. & Kneib, J.-P.: 1998, “Investigating the dark matter distribution with NGST”, in: *The Next Generation Space Telescope*, Proceedings of the 34th Liège International Astrophysics Colloquium, ESA Sp-429, p.89-96.
- O33 Seitz, S., Collodel, L., Pirzkal, N., Erben, T., Freudling, W., Schneider, P., Fosbury, R. & White, S.D.M.: 1998, “Measuring Cosmic Shear in the STIS-parallel data”, in: “Wide Field Surveys in Cosmology”, XIV IAP meeting, eds. Y. Mellier & S. Colombi (Gif-sur-Yvette: Editions Frontieres), p.203.
- O34 Schneider, P.: 2000, “Weak gravitational lensing with SKA”, in: *Perspectives on Radio Astronomy: Science with Large Antenna Arrays*, Proc. of Conf. at Royal Netherlands Acedemy of Art and Sciences, Amsterdam 1999, Ed. M.P. van Haarlem, ASTRON, Dwingeloo, p.203–212.
- O35 Van Waerbeke, L., Mellier, Y., Erben, T., Cuillandre, J.C., Bernardeau, F., Maoli, R., Bertin, E., Mc Cracken, H.J., Le Fèvre, O., Fort, B., Dantel-Fort, M., Jain, B. & Schneider, P.: 2000, “Cosmic shear with the CFHT”, in: *Cosmological physics with gravitational lensing*, Eds. J. Tran Thanh Van, Y. Mellier & M. Moniez, 20th Moriond Astrophysics Meeting, EDP Sciences, p. 165–171.
- O36 Maoli, R., Mellier, Y., van Waerbeke, L., Schneider, P., Jain, B., Erben, T., Bernardeau, F. & Fort, B.: 2000, “Cosmic Shear with the VLT”, in: *Cosmological physics with gravitational lensing*, Eds. J. Tran Thanh Van, Y. Mellier & M. Moniez, 20th Moriond Astrophysics Meeting, EDP Sciences, p. 177–182.
- O37 Mellier, Y., van Waerbeke, L., Erben, T., Schneider, P., Bernardeau, F., Jain, B., Maoli, R., Fort, B., Dantel-Fort, M., Cuillandre, J.C., Mc Cracken, H.J., Le Fèvre, O.: 2000, “Cosmic Shear and Clusters of Galaxies”, in: Proceedings of the IAP2000 conference

- ”Constructing the Universe with Clusters of Galaxies”, eds. D. Gerbal, F. Durret, in press (astro-ph/0010008)
- O38 Maoli, R., Mellier, Y., van Waerbeke, L., Schneider, P., Jain, B., Erben, T., Bernardeau, F., Fort, B., Bertin, E. & Dantel-Fort, M.: 2000, “Cosmic Shear with ANTU/FORS1: An optimal use of service mode observation”, ESO Messenger 101, 10–14.
- O39 Mellier, Y., van Waerbeke, L., Radovich, M., Bertin, E., Dantel-Fort, M., Cuillandre, J.C., Mc Cracken, H.J., Le Fèvre, O., Didelon, P., Morin, B., Moali, R., Erben, T., Bernardeau, F., Schneider, P., Fort, B. & Jain, B.: 2000, “Terapixel Surveys for Cosmic Shear”, in: *Mining the Sky*, ESO Proceedings, eds. A.J. Banday et al. (astro-ph/0012059)
- O40 da Costa, L., Arnouts, S., Bardelli, S., Benoist, C., Biviano, A., Borgani, S., Boschin, W., Erben, T., Girardi, M., Jorgensen, H.E., Olsen, L.F., Ramella, M., Schirmer, M., Schneider, P., Scordiggio, M. & Zucca, E.: 2001, “Optical/Infrared Survey of Galaxy Clusters”, in: Deep Fields, Proceedings of the ESO/ECF/STScI Workshop on Oct. 9.-12., 2000 in Garching, eds. A. Renzini & R.E. Williams, Springer-Verlag, p.187 (also astro-ph/0012254).
- O41 King, L.J., Clowe, D., Schneider, P. & Springel, V.: 2000, “Gravitational lensing studies of high resolution cluster simulations”, in: *New Cosmological Data and the Values of the Fundamental Parameters*, IAU Symp. 201, Manchester, Aug. 2000, in press.
- O42 Mellier, Y., van Waerbeke, L., Maoli, R., Schneider, P., Jain, B., Bernardeau, F., Erben, T. & Fort, B.: 2001, “Cosmic shear surveys”, in: Deep Fields, Proceedings of the ESO/ECF/STScI Workshop on Oct. 9.-12., 2000 in Garching, eds. A. Renzini & R.E. Williams, Springer-Verlag, p.252 (also astro-ph/0101130).
- O43 Lombardi, M. & Schneider, P.: 2001, “The noise of weak lensing reconstructions from a source redshift distribution”, in: *Where’s the Matter? Tracing Dark and Bright Matter with the New Generation of Large Scale Surveys*, Eds. L. Tresse & M. Treyer, Proceedings of a meeting in Marseilles, June 2001, p. 405–409.
- O44 King, L., Schneider, P. & Erben, P.: 2001, “Cluster mass profiles from weak lensing: shear versus magnification information”, in: *Gravitational lensing: Recent progress and future goals*, Eds. T.G. Brainerd & C.S. Kochanek, Astronomical Society of the Pacific Conference Series Vol. 237, p. 321–322.
- O45 Erben, T., van Waerbeke, L., Castander, F.J., Schneider, P. & Mellier, Y.: 2001, “Detection of a dark matter concentration near the cluster Abell 1942 with weak gravitational lensing”, in: *Cosmological physics with gravitational lensing*, Eds. J. Tran Thanh Van, Y. Mellier & M. Moniez, 20th Moriond Astrophysics Meeting, EDP Sciences, p. 145–148.
- O46 Clowe, D. & Schneider, P.: 2001, “Mass profiles of clusters at large radii from weak gravitational lensing”, in: *Where’s the Matter? Tracing Dark and Bright Matter with the New Generation of Large Scale Surveys*, Eds. L. Tresse & M. Treyer, Proceedings of a meeting in Marseilles, June 2001, p. 385–389.
- O47 Kleinheinrich, M., Wolf, C., Borch, A., Sye, S., Gray, M., Meisenheimer, K., Rix, H.-W., Schneider, P. Taylor, A. & Wisotzki, L. 2002: “The COMBO-17 survey”, in: *Where’s the Matter? Tracing Dark and Bright Matter with the New Generation of Large Scale Surveys*, Eds. L. Tresse & M. Treyer, Proceedings of a meeting in Marseilles, June 2001, p. 102–103.

- O48 Kleinheinrich, M., Erben, T., Meisenheimer, K., Rix, H.-W., Schirmer, M., Schneider, P. & Wolf, C.: 2002, “Galaxy-galaxy lensing in the COMBO-17 survey”, in: *Galaxy evolution, theory and observations*, Proceedings of the conference in Cozumel, April 8-12, 2002.
- O49 Hämmerle, H., Miralles, J.-M., Schneider, P., Erben, T., Fosbury, R.A.E., Freudling, W., Pirzkal, N. & White, S.D.M.: 2002, “Cosmic Shear from STIS Pure Parallels: Analysis”, to appear in: *The Dark Universe: Matter, Energy and Gravity*, Proceeding, Baltimore April 2001, also: astro-ph/0109508.
- O50 Miralles, J.-M., Hämmerle, H., Pirzkal, N., Schneider, P., Erben, T., Fosbury, R.A.E., Freudling, W., Jain, B. & White, S.D.M.: 2002, “Detection of Cosmic Shear from STIS Parallel Archive Data: Data Analysis”, to appear in: *The Dark Universe: Matter, Energy and Gravity*, Proceeding, Baltimore April 2001, also: astro-ph/0109485.
- O51 Hämmerle, H., Miralles, J.-M., Schneider, P., Erben, T., Fosbury, R.A.E., Freudling, W., Pirzkal, N. & White, S.D.M.: 2002, “The cosmic shear STIS parallel program - First results”, in: *Where’s the Matter? Tracing Dark and Bright Matter with the New Generation of Large Scale Surveys*, Eds. L. Tresse & M. Treyer, Proceedings of a meeting in Marseilles, June 2001, p. 400–404.
- O52 Bradac, M., Schneider, P., Steinmetz, M., Lombardi, M., King, L. & Porcas, R.: 2002, “Using VLBI data to investigate the galaxy structure in the gravitationally lensed system B1422+231”, in: *Proceedings of the 6th European VLBI Network Symposium*, Ros, E., Porcas, R.W., Lobanov, A.P., & Zensus, J.A. (eds.), MPIfR, Bonn, Germany.
- O53 Bähren, L., Schneider, P. & King L.J.: 2002, “Extraction of relative magnification matrices from VLBI observations of gravitational lens systems”, In: *Proceedings of the 6th European VLBI Network Symposium*, Ros, E., Porcas, R.W., Lobanov, A.P., & Zensus, J.A. (eds.), MPIfR, Bonn, Germany.
- O54 Kleinheinrich, M., Erben, T., Meisenheimer, K., Rix, H.-W., Schirmer, M., Schneider, P. & Wolf, C.: 2003, “The reliability of shape measurements”, in: *Galaxy evolution: Theory & Observations*, V. Avila-Reese, C. Firmani, C.S. Frenk & C. Allen (eds.), Revista Mexicana de Astronomía y Astrofísica (Serie de Conferencias) 17, 36–36.
- O55 Benítez, N., Broadhurst, T., Frye, B., Lidman, C., King, L., Meylan, G. & Schneider, P.: 2002, “Observing  $z > 4$  galaxies through a cosmic lens”, in: *Lighthouses of the Universe*, Eds. M. Gilfanov, R. Sunyaev & E. Churazov, ESO Astrophysics Symposia, Springer-Verlag, p. 239–244.
- O56 Mellier, Y., van Waerbeke, L., Bertin, E., Tereno, I., Schneider, P., Bernardeau, F. & Erben, T.: 2003, “Prospects for weak lensing/cosmic shear with VLTs”, in: *Discoveries and Research Prospects from 6- to 10-Meter-Class Telescopes II*, P. Guhathakurta (ed.), Proceedings of the SPIE 4834, 223–237.
- O57 Kleinheinrich, M., Schneider, P., Erben, T., Schirmer, M., Rix, H.-W., Meisenheimer, K. & Wolf, C.: 2003, “Galaxy-galaxy lensing results from COMBO-17”, in: *Gravitational lensing: a unique tool for cosmology*, ASP Conference Series, D. Valls-Gabaud & J.-P. Kneib (Eds.).
- O58 Schneider, P.: 2003, “Theoretical aspects of weak lensing”, in: *Gravitational lensing: a unique tool for cosmology*, ASP Conference Series, D. Valls-Gabaud & J.-P. Kneib (Eds.).

- O59 Rudnick, G., White, S., Aragon-Salamanca, A., Bender, R., Best, P., Bremer, M., Charlot, S., Clowe, D., Dalcanton, J., Dantel, M., De Lucia, G., Desai, V., Fort, B., Halliday, C., Jablonka, P., Kauffmann, G., Mellier, Y., Milvang-Jensen, B., Pello, R., Poggianti, B., Poirier, S., Rottgering, H., Saglia, R., Schneider, P., Simard, L. & Zaritsky, D.: 2003, “Studying high redshift clusters with the ESO Distant Cluster Survey”, *ESO-Messenger* 112, 19–24.
- O60 Schneider, P.: 2003, “Gravitational lensing as a probe of structure”, in: *Dark Matter and Dark Energy in the Universe*, Proceedings of the XIV Canary Islands Winter School of Astrophysics, Tenerife, Spain
- O61 Hämmerle, H., Miralles, J.-M., Schneider, P., Erben, T., Fosbury, R.A.E., Freudling, W., Pirzkal, N. & White, S.D.M.: 2003, “Cosmic Shear from STIS Pure Parallels – II. Analysis”, in: *Astronomy, Cosmology and Fundamental Physics*, Proceedings of the ESO-CERN-ESA Symposium, Shaver, P., DiLella, L. & Giménez, A. (eds.), Springer-Verlag, p. 455–456.
- O62 Kleinheinrich, M., Schneider, P., Rix, H.-W., Erben, T., Wolf, C., Meisenheimer, K. & Schirmer, M.: 2003, “Measuring Dark Matter Halos Using Galaxy-Galaxy Lensing”, in: *Dark Matter in Galaxies*, IAU Symposium 220, Sydney 2003.
- O63 Dietrich, J., Clowe, D., Schneider, P., Kerp, J. & Romano-Diaz, E.: 2004, “Weak lensing evidence for a filament between A222/A223”, in: *Proc. IAU Colloquium 195: Outskirts of Galaxy Clusters - Intense Life in the Suburbs*, A. Diaferio (ed.), CUP, p. 34–38.
- O64 Schneider, P. & Nilles, H.P.: 2004, “Dunkle Materie und Dunkle Energie”, *Sterne und Weltraum* 3/2004, p. 14.
- O65 Schneider, P.: 2004, “Farewell, Hubble!”, *Physik Journal* Juni 2004, p. 3.
- O66 Bradac, M., Lombardi, M. & Schneider, P.: 2004, “Weighting the Clusters of Galaxies with Weak Gravitational Lensing: The problem of the mass-sheet degeneracy”, in: Proceedings of the XXXIXth Rencontres de Moriond *Exploring the Universe*, in press (also astro-ph/0407032).
- O67 King, L.J., Simon, P. & Schneider, P.: 2005, “Simulating cosmic shear with redshift information”, in: *Proc. IAU Symposium 225: Impact of Gravitational Lensing on Cosmology*, Y. Mellier & G. Meylan (eds.), p. 49–56.
- O68 Kilbinger, M. & Schneider, P.: 2005, “Third-order aperture mass statistics of cosmic shear”, in: *Proc. IAU Symposium 225: Impact of Gravitational Lensing on Cosmology*, Y. Mellier & G. Meylan (eds.), p. 81–86.
- O69 Bradac, M., Schneider, P., Erben, T. & Lombardi, M.: 2005, “Strong and weak lensing united: the cluster mass distribution of RX J1247–1145”, in: *Proc. IAU Symposium 225: Impact of Gravitational Lensing on Cosmology*, Y. Mellier & G. Meylan (eds.), p. 155–160.
- O70 Clowe, D., Schneider, P. and the EDiCS Consortium: 2005, “Results from the ESO Distant Cluster Survey”, in: *Proc. IAU Symposium 225: Impact of Gravitational Lensing on Cosmology*, Y. Mellier & G. Meylan (eds.), p. 173–178.
- O71 Watts, P. & Schneider, P.: 2005, “Higher order cross-correlation functions from galaxy-galaxy-galaxy lensing”, in: *Proc. IAU Symposium 225: Impact of Gravitational Lensing on Cosmology*, Y. Mellier & G. Meylan (eds.), p. 243–248

- O72 Kleinheinrich, M., Rix, H.-W., Schneider, P., Erben, T., Meisenheimer, K., Wolf, C., & Schirmer, M.: 2005, “Galaxy-galaxy lensing studies from COMBO-17”, in: *Proc. IAU Symposium 225: Impact of Gravitational Lensing on Cosmology*, Y. Mellier & G. Meylan (eds.), p. 249–254.
- O73 Schneider, P.: 2006, “Introduction to Gravitational Lensing and Cosmology”, in: Kochanek, C.S., Schneider, P. & Wambsganss, J.: “Gravitational Lensing: Strong, Weak & Micro”, Lecture Notes of the 33rd Saas-Fee Advanced Course, G. Meylan, P. Jetzer & P. North, eds. (Springer-Verlag: Berlin), p. 1–89 (see <http://www.astro.uni-bonn.de/~peter/intro.ps.gz>).
- O74 Schneider, P.: 2006, “Weak Gravitational Lensing”, in: Schneider, P., Kochanek, C.S. & Wambsganss, J.: “Gravitational Lensing: Strong, Weak & Micro”, Lecture Notes of the 33rd Saas-Fee Advanced Course, G. Meylan, P. Jetzer & P. North, eds. (Springer-Verlag: Berlin), p. 269–451 (see <http://www.astro.uni-bonn.de/~peter/WL.ps.gz>), also [astro-ph/0509252](http://astro-ph/0509252).
- O75 Simon, P., Schneider, P., Erben, T., Schirmer, M., Wolf, C. & Meisenheimer, K.: 2005, “The galaxy-dark matter bias in the Garching-Bonn Deep Survey”, in: *Baryons in Dark Matter Halos*, R.-J. Dettmar, U. Klein, P. Salucci (eds.), Proceedings of Science, <http://pos.sissa.it/cgi-bin/reader/conf.cgi?confid=14>, p. 097/1–4.
- O76 Schrabback, T., Miralles, J.-M., Erben, T. & Schneider, P.: 2005, “Cosmic shear with the Advanced Camera for Surveys”, in: *Baryons in Dark Matter Halos*, R.-J. Dettmar, U. Klein, P. Salucci (eds.), Proceedings of Science, <http://pos.sissa.it/cgi-bin/reader/conf.cgi?confid=14>, p. 016/1–3.
- O77 Hettterscheidt, M., Erben, T. & Schneider, P.: 2005, “Searching for clusters using weak lensing”, in: *Baryons in Dark Matter Halos*, R.-J. Dettmar, U. Klein, P. Salucci (eds.), Proceedings of Science, <http://pos.sissa.it/cgi-bin/reader/conf.cgi?confid=14>, p. 079/1–3.
- O78 Turon, C., Done, C., Quirrenbach, A., Schneider, P., Aerts, C., Bazzano, A., Cernicharo, J., de Bernardis, P., Goobar, A., Henning, T., Ivison, R.J., Kneib, J.-P., Meurs, E., van der Klis, M., Viana, P., Volontè, S. & Zeilinger, W.W.: 2005, “Trends in Space Astronomy and Cosmic Vision 2015–2025”, Proc. 39th ESLAB Symposium, Noordwijk, 19-21 April 2005, F. Favata, A. Gimenez (Eds.), in press (also [astro-ph/0510809](http://astro-ph/0510809)).
- O79 Bomans, D.J., Hildebrandt, H., Erben, T., Habertzettl, L. Schneider, P. & Dettmar, R.-J.: 2005, “Lyman break galaxies at  $z \sim 3$  and  $z \sim 4$  in the Chandra Deep Field South”, in: *The Evolution of Starbursts*, 331st Wilhelm and Else Heraeus Seminar, AIP Conference Proceedings, Volume 783, p. 415–418.
- O80 Alba, A.B., Borges da Silva, P., Eichelberger, H., Giovacchini, F., Godolt, M., Hasinger, G., Lerchster, L., Lusset, V., Mattana, F., Mellier, Y., Michalowski, M., Monteserin-Sanchez, C., Noviello, F., Persson, P., Santovincenzo, A., Schneider, P., Zhang, M. & Östman, L.: 2006, “DEMON: a Proposal for a Satellite-Borne Experiment to study Dark Matter and Dark Energy”, in: *Space Telescopes and Instrumentation II: Ultraviolet to Gamma Ray*. M.J.L. Turner & G. Hasinger (eds.), Proceedings of the SPIE, Volume 6266, p. 91–102 (also [astro-ph/0606010](http://astro-ph/0606010)).
- O81 Peacock, J.A. & Schneider, P.: 2006, “The ESO-ESA Working Group on Fundamental Cosmology”, ESO Messenger 125, p. 48–50.

- O82 Peacock, J.A., Schneider, P., Efstathiou, G., Ellis, J.R., Leibundgut, B., Lilly, S. & Mellier, Y.: 2006, “Fundamental Cosmology”, ESA-ESO Working Groups Report No. 3, 131 pages, 28 figures. ESO Garching 2006 (see also [http://www.stecf.org/coordination/esa\\_eso/wg.php?working\\_group=cosmology](http://www.stecf.org/coordination/esa_eso/wg.php?working_group=cosmology), and astro-ph/0610906).
- O83 Hettterscheidt, M., Simon, P., Erben, T., Schneider, P., Schirmer, M., Dietrich, J., Hildebrandt, H., Cordes, O., Schrabback, T., Haberzettl, L., Schmithuesen, O., Wolf, C. & Meisenheimer, K.: 2006, “Weak lensing studies in the virtual Garching-Bonn Deep Survey”, ESO Messenger 126, 19–23.
- O84 Hildebrandt, H., Erben, T., Schirmer, M., Dietrich, J.P. & Schneider, P.: “The Garching-Bonn Deep Survey (GaBoDS) Wide-Field-Imaging Reduction Pipeline”, in: Proceedings of the ESO Calibration Workshop 2007 (also arXiv:0705.0438).
- O85 Schneider, P.: “Die Grundfragen der Kosmologie”, Sterne und Weltraum 7/2007, 44–52.
- O86 Schrabback, T., Simon, P., Erben, T., Schneider, P., Hartlap, J., Heymans, C., Marshall, P., Hildebrandt, H., Fassnacht, C., Morganson, E., Bradac, M., Hettterscheidt, M., Eifler, T., Miralles, Dietrich, J., J.-M., Fosbury, R.A.E., Freudling, W., & Pirzkal, N.: 2007, “Cosmological weak lensing and dark matter mapping with the Hubble Space Telescope”, in: Dark 2007, Preceedings of a conference held in Sydney, October 2007.