

# Curriculum Vitae

## RENE FASSBENDER

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Date of Birth: 03 May 1977 in Diez/Lahn (Germany)

Date of CV: June 2015

### EDUCATION / EMPLOYMENT

2015 – now CEO & Founder at OmegaLambdaTec GmbH, Garching, Germany

2012 – 2014 Marie Curie Research Fellow, Observatory of Rome (INAF-OAR), Rome, Italy

2007 – 2012 Postdoctoral Research Fellow, MPI für extraterrestrische Physik, Garching, Germany

2012 Visiting Scientist (1.5 months), Harvard-Smithsonian Center for Astrophysics, USA

2010 Visiting Scientist (3 months), Pontificia Universidad Catolica de Chile, Santiago, Chile

2008 Visiting Scientist (2 months), University of Illinois at Urbana-Champaign, USA

2007 Ph.D. Ludwig-Maximilians-Universität München, Astrophysics, Advisor: Hans Böhringer  
Dissertation: “*Studying Cosmic Evolution with the XMM-Newton Distant Cluster Project: X-ray Luminous Galaxy Clusters at  $z \gtrsim 1$  and their Galaxy Populations*”  
(summa cum laude)

2004 – 2007 PhD Student, Max-Planck-Institut für extraterrestrische Physik, Garching

2003 Summer Associate, McKinsey & Company, Frankfurt

2003 Diplom Ruprecht-Karls-Universität Heidelberg, Physics (1.1)

2002 – 2003 Max-Planck-Institut für Astronomie, Heidelberg, Diploma Thesis, Advisor: H.-J. Röser  
Thesis Title: “*Commissioning of the near IR camera OMEGA2000 and development of a pipeline reduction system*” (1.0)

1999 – 2000 San Diego State University, San Diego, Astronomy, Student Exchange Year

1998 Vordipl. Ruprecht-Karls-Universität Heidelberg, Physics (1.0)

1996 Abitur Staatl. Gymnasium Diez (1.0)

### SCIENTIFIC / ACADEMIC HONORS

2012 – 2014 Marie Curie Fellow

2008 Wilhelm und Else Heraeus Fellow for the 58. Lindau Nobel Laureate Meeting

2000 – 2007 E-fellows.net Scholarship

1999 – 2000 Fulbright Fellow

1997 – 2002 Fellow of the German National Academic Foundation / Studienstiftung des dt. Volkes

### RESEARCH INTERESTS, OBSERVING PROGRAMS, AND EXPERTISE

**Multi-wavelength Observations and Detection of Distant Galaxy Clusters, Formation and Evolution of Large-Scale Structures, Galaxy Evolution in Clusters, AGN in Distant Cluster Environments, Brightest Cluster Galaxies, Observational Cosmology**

#### Ground-based Observing Programs

optical imaging and multi-slit spectroscopy with FORS2 at VLT 8.2m, HAWK-I NIR imaging at VLT, KMOS NIR multi-IFU at VLT, optical imaging with MOSAIC2 at CTIO Blanco 4m, NIR imaging with ISPI at CTIO 4m, NIR imaging with OMEGA2000 at Calar Alto 3.5m, optical/NIR imaging with WFI and GROND at La Silla/MPG 2.2m

## Space-based Observing Programs

X-ray observations with *XMM-Newton* and *Chandra*, optical/NIR imaging and grism observations with HST, IR imaging with *Spitzer*

## Information Technology Expertise

C, SHELL, IDL, Python, MIDAS, IRAF, XMM-SAS, HTML, MS-Office, Linux, Unix, Windows, Mac OS X

## UNIVERSITY COURSE LECTURES

- 2010 Spring *Introduction to Observational Cosmology II*, LMU, with H. Böhringer & S. Phleps
- 2009 Fall *Introduction to Observational Cosmology I*, LMU, with H. Böhringer & S. Phleps
- 2009 Spring *Galaxies & Galaxy Clusters in the Universe*, LMU, with H. Böhringer & S. Phleps
- 2008 Spring *Cosmological Research with Large Surveys*, LMU, with H. Böhringer & S. Phleps

## PROFESSIONAL ACTIVITIES AND SERVICE

- Referee, Astronomy & Astrophysics
- Referee, Astrophysical Journal
- Referee, Monthly Notices to the Royal Astronomical Society
- Referee, Journal of Cosmology and Astroparticle Physics
- Referee, OPTICON Peer Review
- Referee, Chandra Peer Review Cycle 13
- Referee, Doctorate Studentship Program, Österreichische Akademie der Wissenschaften
- Selection Committee, German National Academic Foundation
- LOC, Conference on “*Heating vs. Cooling in Galaxies and Clusters of Galaxies*”, Garching, 2006
- LOC, Workshop on “*X-ray Studies of Galaxy Clusters and Deep X-ray Surveys*”, Ringberg, 2004
- Member, Deutsche Physikalische Gesellschaft

## SELECTED ORAL AND POSTER PRESENTATIONS

## Talks at Conferences &amp; Workshops

- 2014 Jul *Galaxies in 3D across the Universe*, Conference, Vienna, Austria
- Jun *Future Directions in Galaxy Cluster Surveys*, Conference, Paris, France
- Feb *Multiwavel. Studies of Populations in Clusters and Groups*, Workshop, Parys, South Africa
- Jan *The evolution of galaxy clusters and cluster galaxies*, Workshop, Sesto, Italy
- 2013 Nov *GEE 3 - Galaxy Evolution and Environment*, Workshop, Padova, Italy
- Jul *Tracing Cosmic Evolution with Clusters of Galaxies*, Conference, Sesto, Italy
- May *SAIt 2013*, Conference, Bologna, Italy
- 2012 Sep *Growing up at High Redshift*, Conference, ESAC Madrid, Spain
- Aug *Cosmic Evolution of Galaxy Clusters and Groups*, Conference, Beijing, China
- 2011 Oct *eROSITA: Mapping the Structure of the Energetic Universe*, Conference, Garmisch, Germany
- July *A New Generation of Galaxy Clusters Surveys*, Workshop, Sesto, Italy
- June *The X-ray Universe 2011*, Conference, Berlin, Germany
- Mar *Galaxy Clusters: Crossroads of Astrophysics and Cosmology*, Workshop, Santa Barbara, USA
- 2010 Sep *Evolution of Galaxies, their BHs, and LSS environment*, Conference, Potsdam, Germany
- July *Galaxy Clusters: Observations, Physics, and Cosmology*, Conference, Garching, Germany
- June *CL J2010: from Massive Galaxy Formation to Dark Energy*, Conference, Kashiwa, Japan
- 2009 Nov *Galaxy Clusters in the Early Universe*, Conference, Pucon, Chile
- July *A Multi-Wavelength Look at Galaxy Clusters*, Workshop, Bonn, Germany
- 2008 Apr *An XXL Extragalactic Survey: Prospects for the XMM Next Decade*, Workshop, Paris, France
- 2005 Oct *Distant Clusters of Galaxies*, Workshop, Ringberg Castle, Germany

## Colloquia &amp; Seminars

- 2014 Nov University of Sussex, Brighton, Great Britain  
 — Nov University of Bristol, Bristol, Great Britain  
 2013 June HITS, Heidelberg, Germany  
 — June University of Bonn, Bonn, Germany  
 — Apr Observatory of Rome, Rome, Italy  
 — Mar University of Vienna, Wien, Austria  
 2012 Sep Leibniz Institut für Astrophysik (AIP), Potsdam, Germany  
 — Jul Harvard-Smithsonian Center for Astrophysics (CfA), Cambridge, USA  
 — Apr Rome Observatory, Rome, Italy  
 — Feb Leiden Observatory, Leiden, Netherlands  
 2011 Nov ESA/ESOC, Darmstadt, Germany  
 — June Harvard-Smithsonian Center for Astrophysics (CfA), Cambridge, USA  
 — June Excellence Cluster Universe, Garching, Germany  
 — Jan ESO, Santiago, Chile  
 2010 Dec Universidad Catolica de Chile, Santiago, Chile  
 — Dec Universidad Andres Bello, Santiago, Chile  
 — Oct USM Colloquium, USM, München, Germany  
 2009 Sep Institute Seminar Highlight Talk, MPE, Garching, Germany  
 2008 Dec INAF Astronomical Observatory, Bologna, Italy  
 — Nov Department of Astronomy, University of Illinois, Urbana-Champaign, USA  
 — Nov Harvard-Smithsonian Center for Astrophysics (CfA), Cambridge, USA  
 2007 Sep OPINAS Seminar, MPE, Garching, Germany  
 — Mar Institute Science Day, MPE, Garching, Germany  
 2006 Sep Departamento de Astronomia y Astrofisica, Pontificia Universidad Catolica, Santiago, Chile  
 — Sep National Optical Astronomy Observatory (NOAO), La Serena, Chile  
 — Apr Calar Alto Colloquium, Granada, Spain

## Poster Presentations

- 2014 Sep *Waves and Particles: Multi-Messengers from the Universe*, Conference, Tübingen, Germany  
 — June *The physical link between galaxies and their halos*, Conference, Garching, Germany  
 2011 Oct *The Dark Universe*, Conference, Heidelberg, Germany  
 — Mar *Monsters, Inc.: Astrophysics & Cosmology with GCs*, Conference, Santa Barbara, USA  
 2009 Sep *X-ray Astronomy 2009*, Conference, Bologna, Italy  
 2008 Oct *Dark Energy*, Conference, München, Germany  
 — May *The X-ray Universe 2008*, Conference, Granada, Spain  
 2006 Aug *Heating vs. Cooling in Galaxies and Clusters of Galaxies*, Conference, München, Germany  
 2005 Nov *Relativistic Astrophysics and Cosmology – Einstein’s Legacy*, Conference, München, Germany  
 2004 May *X-ray Studies of Galaxy Clusters and Deep X-ray Surveys*, Workshop, Ringberg, Germany

## Presentations for General Audiences

- 2015 Jan New Year’s Reception of the German National Academic Foundation, München, Germany  
 2014 Oct Sophie-Hedwig-Gymnasium Diez, Diez, Germany  
 2007 Mai Heisenberg Tag des Max-Weber-Programms Bayern, MPI für Physik, München, Germany

## PUBLICATIONS

## Refereed Papers

- 2015 1. Romeo, A. D., Kang, X., Contini, E., Sommer-Larsen, J., **Fassbender, R.**, Napolitano, N. R., Antonuccio-Delogu, V., and Gavignaud, I., 2015, *A study on the multicolour evolution of Red Sequence galaxy populations: insights from hydrodynamical simulations and semi-analytical models*, submitted to A&A, arXiv:1505.06091
2. Santos, J. S., Altieri, B., Valtchanov, I., Nastasi, A., Boehringer, H., G. Cresci, D. Elbaz, **Fassbender, R.**, P. Rosati, P. Tozzi, and M. Verdugo, 2015, *The reversal of the SF-density relation in a massive, X-ray selected galaxy cluster at  $z=1.58$ : results from Herschel*, MNRAS, 447, L65, arXiv:1412.5188
3. Tozzi, P., Santos, J. S., Jee, M. J., **Fassbender, R.**, Rosati, P., Nastasi, A., Forman, W., Sartoris, B., Borgani, S., Boehringer, H., Altieri, B., Pratt, G. W., Nonino, M., and Jones, C., 2015, *Chandra deep observation of XDCP J0044.0-2033, a massive galaxy cluster at  $z>1.5$* , ApJ, 799, 93, arXiv:1412.5200
- 2014 4. **Fassbender, R.**, Nastasi, A., Santos, J.S., Lidman, C., Verdugo, M., Koyama, Y., Rosati, P., Pierini, D., Padilla, N., Romeo, A.D., Menci, N., Bongiorno, A., Castellano, M., Cerulo, P., Fontana, A., Galametz, A., Grazian, A., Lamastra, A., Pentericci, L., Sommariva, V., Strazzullo, V., Suhada, R., and Tozzi, P., 2014, *Galaxy population properties of the massive X-ray luminous galaxy cluster XDCP J0044.0-2033 at  $z=1.58$  - Red-sequence formation, massive galaxy assembly, and central star formation activity*, A&A, 568, A5, arXiv:1406.3037
5. Nastasi, A., Boehringer, H., **Fassbender, R.**, de Hoon, A., Lamer, G., Mohr, J. J., Padilla, N., Pratt, G. W., Quintana, H., Rosati, P., Santos, J. S., Schwobe, A. D., Suhada, R., and Verdugo, M., 2014, *Kinematic analysis of a sample of X-ray luminous distant galaxy clusters. The  $L_X - \sigma_v$  relation in the  $z > 0.6$  universe*, A&A, 564, A17, arXiv:1311.4879
- 2013 6. Galametz, A., Stern, D., Pentericci, L., De Breuck, C., Vernet, J., Wylezalek, D., **Fassbender, R.**, Hatch, N., Kurk, J., Overzier, R., Rettura, A., and Seymour, N., 2013, *A large-scale galaxy structure at  $z = 2.02$  associated with the radio galaxy MRC 0156-252*, A&A, 559, A2, arXiv:1309.6645
7. de Hoon, A., Lamer, G., Schwobe, A., Mühlegger, M., **Fassbender, R.**, Böhringer, H., Lerchster, M., Nastasi, A., Šuhada, R., Brimiouille, F., Dietrich, J.P., Rosati P., Pierini, D., Verdugo, M., Santos, J.S., Quintana, H., Rabitz, A., and Takey, A., 2013, *Galaxy clusters in a deep XMM-Newton field within the CFTHLS D4*, A&A, 551, A8, arXiv:1301.3506
8. Nastasi, A., Scodreggio, M., **Fassbender, R.**, Böhringer, H., Pierini, D., Verdugo, M., Garilli, B.M., and Franzetti, P., 2013, *F-VIPGI: a new adapted version of VIPGI for FORS2 spectroscopy - Application to a sample of 16 X-ray selected galaxy clusters at  $0.6 \leq z \leq 1.2$* , A&A, 550, A9, arXiv:1301.2327
- 2012 9. **Fassbender, R.**, Nastasi, A., Suhada, R., 2012, *AGN triggering in the infall regions of distant X-ray luminous galaxy clusters at  $0.9 < z \lesssim 1.6$* , 2012, Advances in Astronomy, vol. 2012, Article ID 138380, 15 pages, arXiv:1203.5337
10. Pierini, D., Suhada, R., **Fassbender, R.**, Nastasi, A., Böhringer, H. , Salvato, M., Pratt, G.W., Lerchster , M., Rosati, P., Santos, J.S., de Hoon, A., Kohnert, J., Lamer, G., Mohr, J.J., Mühlegger, M., Quintana, H., Schwobe, A., Biffi, V., Chon, G., Giodini, S., Koppenhoefer, J., Verdugo, M., Ziparo, F., Afonso, P. M. J., Clemens, C., Greiner, J., Krühler, T., Küpcü Yoldas, A., Olivares, F., Rossi, A., and Yoldas A., 2012, *First simultaneous optical/near-infrared imaging of an X-ray selected, high-redshift cluster of galaxies with GROND - The galaxy population of XMMUJ0338.7+0030 at  $z = 1.1$* , A&A, 540, A45, arXiv:1201.1925

11. Šuhada, R., Song, J., Böhringer, H., Mohr, J. J., Chon, G., Finoguenov, A., **Fassbender, R.**, Desai, S., Armstrong, R., Zenteno, A., Barkhouse, W. A., Bertin, E., Buckley-Geer, E. J., Hansen, S. M., High, F. W., Lin, H., Mühlegger, M., Ngeow, C. C., Pierini, D., Pratt, G. W., Verdugo, M., and Tucker, D. L., 2012, *The XMM-BCS galaxy cluster survey: I. The X-ray selected cluster catalog from the initial 6 deg<sup>2</sup>*, A&A, 537, A39, arXiv:1111.0141
- 2011 12. **Fassbender, R.**, Böhringer, H., Nastasi, A., Suhada, R., Mühlegger, M., de Hoon, A., Kohnert, Lamer, G., Mohr, J. J., Pierini, D., Pratt, G. W., Quintana, H., Rosati, P., Santos, J. S., and Schwobe, A. D., 2011, *The X-ray luminous galaxy cluster population at  $0.9 < z \lesssim 1.6$  as revealed by the XMM-Newton Distant Cluster Project*, New J. Phys., 13,125014, arXiv:1111.0009
13. Reichert, A., Böhringer, H., **Fassbender, R.**, and Mühlegger, M., 2011, *Observational constraints on the redshift evolution of X-ray scaling relations of galaxy clusters out to  $z \sim 1.5$* , A&A, 535, A4, arXiv:1109.3708
14. Nastasi, A., **Fassbender, R.**, Böhringer, H., Šuhada, R., Rosati, P., Pierini, D., Verdugo, M., Santos, J. S., Schwobe, A. D., de Hoon, A., Kohnert, J., Lamer, G., Mühlegger, M., Quintana, H., 2011, *Discovery of the X-ray selected galaxy cluster XMMU J0338.8+0021 at  $z = 1.49$  - Indications for a young system with a forming brightest galaxy*, A&A, 532, L6, arXiv:1106.5784
15. Santos, J. S., **Fassbender, R.**, Nastasi, A., Böhringer, H., Rosati, P., Suhada, R., Pierini, D., Nonino, M., Muehlegger, M., Quintana, H., Schwobe, A. D., Lamer, G., de Hoon, A., Strazzullo, V., 2011, *Discovery of a massive X-ray luminous galaxy cluster at  $z=1.579$* , A&A, 531, L15, arXiv:1105.5877
16. Šuhada, R., **Fassbender, R.**, Nastasi, A., Böhringer, H., de Hoon, A., Pierini, D., Santos, J. S., Rosati, P., Mühlegger, M., Quintana, H., Schwobe, A. D., Lamer, G., Kohnert, J., Pratt, G. W., *Exploring the galaxy cluster-group transition regime at high redshifts. Physical properties of two newly detected  $z > 1$  systems*, A&A, 530, A110, arXiv:1104.4888
17. **Fassbender, R.**, Nastasi, A., Böhringer, H., Suhada, R., Santos, J. S., Rosati, P., Pierini, D., Mühlegger, M., Quintana, H., Schwobe, A. D., Lamer, G., de Hoon, A., Kohnert, J., Pratt, G. W., and Mohr, J. J., 2011, *The X-ray luminous galaxy cluster XMMU J1007.4+1237 at  $z=1.56$  - The dawn of starburst activity in cluster cores*, A&A, 527, L10, arXiv:1101.3313
18. **Fassbender, R.**, Böhringer, H., Santos, J. S., Pratt, G. W., Suhada, R., Kohnert, J., Lerchster, M., Rovilos, M., Pierini, D., Chon, G., Schwobe, A. D., Lamer, G., Mühlegger, M., Rosati, P., Quintana, H., Nastasi, A., de Hoon, A., Seitz, S., and Mohr, J. J., 2011, *A pan-chromatic view of the galaxy cluster XMMU J1230.3+1339 at  $z=0.975$  - Observing the assembly of a massive system*, A&A, 527, A78, arXiv:1009.0264
19. Lerchster, M., Seitz, S., Brimiouille, F., **Fassbender, R.**, Rovilos, M., Böhringer, H., Pierini, D., Kilbinger, M., Finoguenov, A., Quintana, H., Bender, R., 2010, *The Massive Galaxy Cluster XMMU J1230.3+1339 at  $z \sim 1$ : Colour-magnitude relation, Butcher-Oemler effect, X-ray and weak lensing mass estimates*, MNRAS, 411, 2667-2694, arXiv:1009.3930
- 2010 20. Strazzullo, V., Rosati, P., Pannella, M., Gobat, R., Santos, J., Nonino, M., Demarco, R., Lidman, C., Tanaka, M., Mullis, C., Nunez, C., Rettura, A., Jee, M. J., Bohringer, H., Bender, R., Bouwens, R., Dawson, K., **Fassbender, R.**, Franx, M., Perlmutter, S., Postman, M., 2010, *Cluster galaxies in XMMU J2235-2557: galaxy population properties in most massive environments at  $z \sim 1.4$* , A&A, 524, A17, arXiv:1009.1423
21. Šuhada, R., Song, J., Böhringer, H., Benson, B. A., Mohr, J., **Fassbender, R.**, Finoguenov, A., Pierini, D., Pratt, G. W., Andersson, K., Armstrong, R., Desai, S., 2010, *XMM-Newton detection of two clusters of galaxies with strong SPT Sunyaev-Zel'dovich effect signatures*, A&A, 514, L3

22. Schwobe, A. D., Lamer, G., de Hoon, A., Kohnert, J., Böhringer, H., Dietrich, J. P., **Fassbender, R.**, Mohr, J., Mühlegger, M., Pierini, D., Pratt, G. W., Quintana, H., Rosati, P., Santos, J., Šuhada, R., 2010, *XMMU J100750.5+125818: a strong lensing cluster at  $z=1.082$* , A&A, 513, L10
- 2009 23. Rosati, P., Tozzi, P., Gobat, R., Santos, J. S., Nonino, M., Demarco, R., Lidman, C., Mullis, C. R., Strazzullo, V., Böhringer, H., **Fassbender, R.**, Dawson, K., Tanaka, M., Jee, J., Ford, H., Lamer, G., Schwobe, A., 2009, *Multi-wavelength study of XMMU J2235.3-2557: the most massive galaxy cluster at  $z > 1$* , A&A, 508, 583
24. Jee, M. J., Rosati, P., Ford, H. C., Dawson, K. S., Lidman, C., Perlmutter, S., Demarco, R., Strazzullo, V., Mullis, C., Böhringer, H., and **Fassbender, R.**, 2009, *Hubble Space Telescope Weak-lensing Study of the Galaxy Cluster XMMU J2235.3 - 2557 at  $z \sim 1.4$ : A Surprisingly Massive Galaxy Cluster When the Universe is One-third of its Current Age*, ApJ, 704, 672
25. Santos, J. S., Rosati, P., Gobat, R., Lidman, C., Dawson, K., Perlmutter, S., Böhringer, H., Balestra, I., Mullis, C. R., **Fassbender, R.**, Kohnert, J., Lamer, G., Rettura, A., Rit e, C. and Schwobe, A., 2009, *Multiwavelength observations of a rich galaxy cluster at  $z \sim 1$ . The HST/ACS colour-magnitude diagram*, A&A, 501, 49-60
- 2008 26. **Fassbender, R.**, Böhringer, H., Lamer, G., Mullis, C. R., Rosati, P., Schwobe, A., Kohnert, J. and Santos, J. S., 2008, *Indications for 3 Mpc-scale large-scale structure associated with an X-ray luminous cluster of galaxies at  $z=0.95$* , A&A, 481, L73-L77
- 2005 27. Mullis, C. R., Rosati, P., Lamer, G., Böhringer, H., Schwobe, A., Schuecker, P. and **Fassbender, R.**, 2005, *Discovery of an X-Ray-luminous Galaxy Cluster at  $z=1.4$* , ApJL, 623, L85-L88

#### Selected Conference Proceedings

- 2008 28. **Fassbender, R.**, Böhringer, H., Santos, J., Lamer, G., Mullis, C., Schuecker, P., Schwobe, A. and Rosati, P., 2008, *The XMM-Newton Distant Cluster Project*, Relativistic Astrophysics and Cosmology - Einstein's Legacy, ESO Astrophysics Symposia, p307
- 2007 29. **Fassbender, R.**, Böhringer, H., Santos, J., Schuecker, P., Lamer, G., Schwobe, A., Kohnert, J., Rosati, P., Mullis, C. and Quintana, H., 2007, *The XDCP Prospects of Finding Cooling Core Clusters at Large Lookback Times*, Heating versus Cooling in Galaxies and Clusters of Galaxies, ESO Astrophysics Symposia, p54
- 2006 30. **Fassbender, R.**, Stegmaier, J., Weijmans, A.-M., Köstner, S., Kruselburger, A., Diethart, C., Fertl, P., Valiante, E., Hayes, M., Schuecker, P. and Hasinger, G., 2006, *VADER: a satellite mission concept for high precision dark energy studies*, Proceedings of the SPIE, Vol. 6266, p626632

#### Selected Non-Refereed Publications

- 2013 31. Pointecouteau, E., Reiprich, T. H., Adami, C., Arnaud, M., Biffi, V., Borgani, S., Borm, K., Bourdin, H., Brueggen, M., Bulbul, E., Clerc, N., Croston, J. H., Dolag, K., Ettori, S., Finoguenov, A., Kaastra, J., Lovisari, L., Maughan, B., Mazzotta, P., Pacaud, F., de Plaa, J., Pratt, G. W., Ramos-Ceja, M., Rasia, E., Sanders, J., Zhang, Y.-Y., Allen, S., Böhringer, H., Brunetti, G., Elbaz, D., **Fassbender, R.**, Hoekstra, H., Hildebrandt, H., Lamer, G., Marrone, D., Mohr, J., Molendi, S., Nevalainen, J., Ohashi, T., Ota, N., Pierre, M., Romer, K., Schindler, S., Schrabback, T., Schwobe, A., Smith, R., Springel, V., and von der Linden, A., *The Hot and Energetic Universe: The evolution of galaxy groups and clusters*, 2013, arXiv:1306.2319
- 2005 32. Böhringer, H., Mullis, C., Rosati, P., Lamer, G., **Fassbender, R.**, Schwobe, A. and Schuecker, P., 2005, *Galaxy Cluster Archaeology*, The Messenger, 120, 33-36

## Thesis Work

- 2007 33. **Fassbender, R.**, 2007, *Studying Cosmic Evolution with the XMM-Newton Distant Cluster Project: X-ray Luminous Galaxy Clusters at  $z \gtrsim 1$  and their Galaxy Populations*, PhD thesis, LMU München, arXiv:0806.0861
- 2003 34. **Fassbender, R.**, 2003, *Commissioning of the near IR camera OMEGA2000 and development of a pipeline reduction system*, Diploma thesis, Universität Heidelberg