### Dr. Florian Beutler

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RESEARCH INTERESTS

• Observational cosmology and large scale structure of the Universe: Primarily baryon acoustic oscillations, redshift space distortions, neutrino cosmology, perturbation theory applications to LSS and halo occupation distribution.

Professional Experience

- Royal Society Fellowship (URF) (starting January 2018).
- Ernest Rutherford Fellowship (June 2017 present), Institute of Cosmology and Gravitation, University of Portsmouth.
- Research Fellow, 5 year appointment (February 2016 to June 2017), Institute of Cosmology and Gravitation, University of Portsmouth.
- Postdoctoral Fellow, 3.5 year appointment (October 2012 to 2016), Lawrence Berkeley National Laboratory, Berkeley, CA, USA.

## EDUCATION

## University of Western Australia, Perth, Australia

PhD, Astrophysics/Cosmology (Graduated September 2012)

- Thesis Topic: Cosmology with the 6-degree Field Galaxy Survey
- Supervisors: Associate Professor Chris Blake, Professor Lister Staveley-Smith, Professor Peter Quinn, Dr. Heath Jones
- Scholarship: IPRS/SIRF scholarship

### University of Heidelberg, Heidelberg, Germany

Diploma (equiv. to Master), Physics (Graduated October 2008)

- Thesis Topic: Theoretical modeling of hadron production in heavy ion and elementary particle collision
- Supervisor: Professor Johanna Stachel

Bachelor, Computer Science (Graduated October 2008)

Graduation from secondary school, Schorndorf, Germany, July 2003 (Abitur: best student of the year).

## ACADEMIC EXPERIENCE

## Project Supervision

- Main supervisor of PhD student: Paul Carter (September 2015 to present)
- Co-supervision of student projects: Chirag Modi (July 2014 to February 2016), Eric Aldabe (January 2014 to September 2014)

### Collaboration memberships

- Member of the Euclid collaboration. I am co-chair of the Euclid galaxy clustering working group and lead of the Euclid Internal Data work package for Spectroscopic visibility mask and Sample Selection.
- Member of the DESI collaboration.
- Member of the eBOSS collaboration.
- Member of the Taipan collaboration.

#### Grants and Awards

- Royal Society University Research Fellowship (£500 000 800 000), 2017
- ICG Achievement award (£2000), 2017
- $\bullet$ Ernest Rutherford Fellowship (£500000), 2017
- UWA publication award special commendation (AU\$250), 2012
- UWA Overseas Travel Award (AU\$1850), 2012
- Australian Society of Astronomy (ASA) travel award (AU\$1000), 2011
- Graduate Research School Travel (GRST) award (AU\$5000), 2011
- Australian Society of Astronomy (ASA) meeting, best student poster prize (AU\$100), 2011
- AAO top-up scholarship (AU\$15000), 2009-2012
- SKA top-up scholarship (AU\$18000), 2009-2012
- International Postgraduate Research Scholarship (IPRS), 2009-2012

### Journal refereeing

- Referee for the Astrophysical Journal, since 2012
- Referee for MNRAS, since 2012
- Referee for JCAP, since 2014
- Referee for "Welt der Physik", since 2014
- Referee for Physical Review D, since 2015

#### Media

- I co-organized the media release connected to the BOSS DR12 data release, see for example this article.
- Combined with the publication of the BAO analysis in the 6-degree Field Galaxy Survey, I co-organized a media release, which lead to more than 100 print and online articles in about 20 countries.
- Invitation to the TED@Sydney Young talent competition, see talk online here.

### Benty-fields

In 2015 I co-founded the academic networking website benty-fields.com and I am now its main developer. The website offers a journal club organiser, a fast arXiv search engine based on elasticsearch, a user-friendly environment to read arXiv papers and an academic job market. We now have more than 1500 users and host more than 100 journal clubs.

### SKILLS

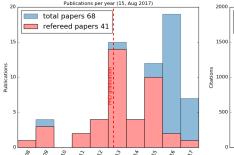
Extensive experience with several programming languages including C/C++, Python, Fortran, root, HTML, openCL, openGL, LATEX, flask, SQL, MySQL, SQLalchemy, postgreSQL, elasticsearch, javascript as well as parallel programming tools like MPI, openMP

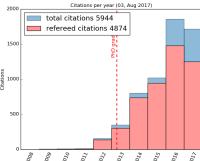
I speak German and English fluently and have basic knowledge of French

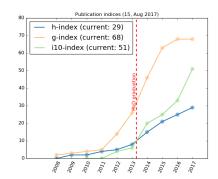
## SELECTED PRESENTATIONS

- 1. I have been invited to give seminars and colloquia at John Moore University (05/2017), Stanford University (03/2017), University of Amsterdam (12/2016), EPFL Lausanne (11/2016), MPA Munich (10/2016), DAMTP Cambridge (04/2016), Queen Mary University London (03/2016), UCL London (04/2016), Fermilab (11/2015), SLAC Stanford (02/2014), CfA Boston (02/2012), LBNL Berkeley (02/2012)
- 2. Invited speaker for the 'Nonlinear evolution of the large scale structure of the Universe: Theory meets Expectations' conference at the IAP, Paris (05/2016)
- 3. Invited speaker for the 'Cosmic flows' workshop at the Perimeter Institute, Waterloo, Canada (09/2015)

- 4. Invited lecturer for the Andean Cosmology summer school in Bogota, Columbia (4 days of lectures, 2 hours each, 07/2015)
- 5. Invited to a lecture series at University of British Columbia, Simon Fraser University, Herzberg Institute and University of Victoria (03/2015)
- 6. Invited for a review lecture on Baryon Acoustic Oscillations and Redshift Space Distortion, Santa Fe Cosmology Workshop, New Mexico (07/2014)
- 7. TED@Sydney Young talent competition, Sydney, Australia (05/2012) (http://www.youtube.com/watch?v=TUorF-2e08k)
- 8. PhD summary talk, AAS, Austin (01/2012)







I played a major role in the science contributing to 37 of the 68 publications, the others being collaboration papers where input was through collaboration activity including editing draft papers and contributions to producing the data sets including both management and practical work. h-index = 29 (i.e. 29 papers with > 29 citations), with 13 papers having more than 100 citations (source: NASA ads).

### First author publications

- 1. Constraining the relative velocity effect using the Baryon Oscillation Spectroscopic Survey F. Beutler; Seljak, Uros; Vlah, Zvonimir, [arXiv:1612.04720]
- 2. The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: Anisotropic galaxy clustering in Fourier-space
  - **F. Beutler**; Seo, Hee-Jong; Saito, Shun; Chuang, Chia-Hsun; Cuesta, Antonio J.; Eisenstein, Daniel J.; Gil-Marn, Hctor; Grieb, Jan Niklas (+15 co-authors), [arXiv:1607.03150]
- 3. The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: Baryon Acoustic Oscillations in Fourier-space
  - **F. Beutler**; Seo, Hee-Jong; Ross, Ashley J.; McDonald, Patrick; Saito, Shun; Bolton, Adam S.; Brownstein, Joel R.; Chuang, Chia-Hsun (+21 co-authors), [arXiv:1607.03149]
- 4. The BOSS-WiggleZ overlap region I: Baryon Acoustic Oscillations

  F. Beutler; Blake, Chris; Koda, Jun; Marin, Felipe A.; Seo, Hee-Jong; Cuesta, Antonio J.; Schneider, Donald P., MNRAS, 455.3230B, 2015, [arXiv:1506.03900]
- 5. The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: Signs of neutrino mass in current cosmological datasets
  - **F. Beutler**; Saito, Shun; Brownstein, Joel R.; Chuang, Chia-Hsun; Cuesta, Antonio J.; Percival, Will J.; Ross, Ashley J.; Ross, Nicholas P. (+7 co-authors), MNRAS 444.3501 (2014), [arXiv:1403.4599]
- 6. The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: Testing gravity with redshift-space distortions using the power spectrum multipoles
  - **F. Beutler**; Saito, Shun; Seo, Hee-Jong; Brinkmann, Jon; Dawson, Kyle S.; Eisenstein, Daniel J.; Font-Ribera, Andreu; Ho, Shirley (+10 co-authors), MNRAS 443.1065B (2014), [arXiv:1312.4611]
- 7. The 6dF Galaxy Survey: dependence of halo occupation on stellar mass F. Beutler; Blake, Chris; Colless, Matthew; Jones, D. Heath; Staveley-Smith, Lister; Campbell, Lachlan; Parker, Quentin; Saunders, Will; Watson, Fred, MNRAS 429.3604B (2013), [arXiv:1212.3610]
- 8. The 6dF Galaxy Survey: Low redshift measurements of the growth of structure and  $\sigma_8$  **F. Beutler**; Blake, Chris; Colless, Matthew; Jones, D. Heath; Staveley-Smith, Lister; Poole, Gregory B.; Campbell, Lachlan; Parker, Quentin; Saunders, Will; Watson, Fred, MNRAS 423.3430B (2012), [arXiv:1204.4725]
- 9. The 6dF Galaxy Survey: Baryon Acoustic Oscillations and the Local Hubble Constant F. Beutler; Blake, Chris; Colless, Matthew; Jones, D. Heath; Staveley-Smith, Lister; Poole, Gregory B.; Campbell, Lachlan; Parker, Quentin; Saunders, Will; Watson, Fred, MNRAS 416.3017B (2011), [arXiv:1106.3366]

(This paper was accompanied by a media release, which led to more than 100 articles in 20 countries.)

 The canonical partition function for relativistic hadron gases
 F. Beutler; Andronic, A.; Braun-Munzinger, P.; Redlich, K.; Stachel, J., Eur.Phys.J.C67:439-444 (2010), [arXiv:0910.1697]

## Further publications

- 1. Imprints of Reionization in Galaxy Clustering Fabian Schmidt, **Florian Beutler**, [arXiv:1705.07843]
- 2. Extending the modeling of the anisotropic galaxy power spectrum to  $k = 0.4hMpc^{-1}$  Nick Hand, Uros Seljak, **Florian Beutler**, Zvonimir Vlah, [arXiv:1706.02362]
- 3. Theoretical Systematics of Future Baryon Acoustic Oscillation Surveys
  Zhejie Ding, Hee-Jong Seo, Zvonimir Vlah, Yu Feng, Marcel Schmittfull, Florian Beutler [arXiv:1706.01297]
- 4. The Fourteenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the extended Baryon Oscillation Sky Survey and from the second phase of the Apache Point Observatory Galactic Evolution Experiment

  Abolfathi, Bela; Aguado, D. S.; Aguilar, Gabriela; Allende Prieto, Carlos; Almeida, Andres; Tasnim Ananna, Tonima; Anders, Friedrich; Anderson, Scott F.; Andrews, Brett H.; Anguiano, Borja; (+317 co-authors including F. Beutler), [arXiv:1707.09322]
- 5. Dynamical dark energy in light of the latest observations
  Zhao, Gong-Bo; Raveri, Marco; Pogosian, Levon; Wang, Yuting; Crittenden, Robert G.; Handley, Will J.; Percival, Will J.; Beutler, Florian; Brinkmann, Jonathan; Chuang, Chia-Hsun; (+16 co-authors), [arXiv:1701.08165]
- 6. The clustering of the SDSS-IV extended Baryon Oscillation Spectroscopic Survey DR14 quasar sample: First measurement of Baryon Acoustic Oscillations between redshift 0.8 and 2.2

  Ata, Metin; Baumgarten, Falk; Bautista, Julian; Beutler, Florian; Bizyaev, Dmitry; Blanton, Michael R.; Blazek, Jonathan A.; Bolton, Adam S.; Brinkmann, Jonathan; Brownstein, Joel R.; (+53 co-authors), [arXiv:1705.06373]
- 7. Consistency of the growth rate in different environments with the 6dF Galaxy Survey: measurement of the void-galaxy and galaxy-galaxy correlation functions
  Achitouv, I.; Blake, C.; Carter, P.; Koda, J.; Beutler, F., PhRvD, 95 (2017)[arXiv:1606.03092]
- 8. Sloan Digital Sky Survey IV: Mapping the Milky Way, Nearby Galaxies, and the Distant Universe Blanton, Michael R.; Bershady, Matthew A.; Abolfathi, Bela; Albareti, Franco D.; Allende Prieto, Carlos; Almeida, Andres; Alonso-Garca, Javier; Anders, Friedrich; Anderson, Scott F.; Andrews, Brett; (+353 co-authors including F. Beutler), AJ, 154, 1 (2017)[arXiv:1703.00052]
- 9. The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: constraining modified gravity

  Mueller, Eva-Maria; Percival, Will; Linder, Eric; Alam, Shadab; Zhao, Gong-Bo; Snchez, Ariel G.; Beutler, Florian, [arXiv:1612.00812]
- 10. The DESI Experiment Part I: Science, Targeting, and Survey Design
  Aghamousa, Amir; Aguilar, Jessica; Ahlen, Steve; Alam, Shadab; Allen, Lori E.; Allende Prieto, Carlos;
  Annis, James (+255 co-authors including **F. Beutler**), [arXiv:1611.00036]
- 11. The DESI Experiment Part II: Instrument Design
  Aghamousa, Amir; Aguilar, Jessica; Ahlen, Steve; Alam, Shadab; Allen, Lori E.; Allende Prieto, Carlos;
  Annis, James (+255 co-authors including **F. Beutler**), [arXiv:1611.00037]
- 12. The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: theoretical systematics and Baryon Acoustic Oscillations in the galaxy correlation function Vargas-Magana, Mariana; Ho, Shirley; Cuesta, Antonio J.; O'Connell, Ross; Ross, Ashley J.; Eisenstein, Daniel J.; Percival, Will J.; Grieb, Jan Niklas (+13 co-authors including F. Beutler), [arXiv:1610.03506]

- 13. The Clustering of Galaxies in the Completed SDSS-III Baryon Oscillation Spectroscopic Survey: Cosmic Flows and Cosmic Web from Luminous Red Galaxies

  Ata, Metin; Kitaura, Francisco-Shu; Chuang, Chia-Hsun; Rodriguez-Torres, Sergio; Angulo, Raul E.; Ferraro, Simone; McDonald, Patrick; Hernandez Monteagudo, Carlos (+24 co-authors including F. Beutler),
  [arXiv:1605.09745]
- 14. The Clustering of Galaxies in the Completed SDSS-III Baryon Oscillation Spectroscopic Survey: single-probe measurements from DR12 galaxy clustering towards an accurate model Chia-Hsun Chuang, Marcos Pellejero-Ibanez, Sergio Rodriguez-Torres, Ashley J. Ross, Gong-bo Zhao, Yuting Wang, Antonio J. Cuesta, J. A. Rubino-Martin (+20 co-authors including F. Beutler), [arXiv:1607.03151]
- 15. The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: combining correlated Gaussian posterior distributions

  Sanchez, Ariel G.; Grieb, Jan Niklas; Salazar-Albornoz, Salvador; Alam, Shadab; Beutler, Florian; Ross, Ashley J.; Brownstein, Joel R.; Chuang, Chia-Hsun (+12 co-authors), [arXiv:1607.03146]
- 16. The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: tomographic BAO analysis of DR12 combined sample in Fourier space

  Zhao, Gong-Bo; Wang, Yuting; Saito, Shun; Wang, Dandan; Ross, Ashley J.; Beutler, Florian; Grieb, Jan Niklas; Chuang, Chia-Hsun (+20 co-authors), [arXiv:1607.03153]
- 17. The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: Cosmological implications of the Fourier space wedges of the final sample
  Grieb, Jan Niklas; Sanchez, Ariel G.; Salazar-Albornoz, Salvador; Scoccimarro, Roman; Crocce, Martin;
  Dalla Vecchia, Claudio; Montesano, Francesco; Gil-Marin, Hector (+20 co-authors including F. Beutler),
  [arXiv:1607.03143]
- 18. The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: cosmological implications of the configuration-space clustering wedges
  Sanchez, Ariel G.; Scoccimarro, Roman; Crocce, Martin; Grieb, Jan Niklas; Salazar-Albornoz, Salvador; Vecchia, Claudio Dalla; Lippich, Martha; Beutler, Florian (+16 co-authors), [arXiv:1607.03147]
- 19. The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: Observational systematics and baryon acoustic oscillations in the correlation function
  Ross, Ashley J.; Beutler, Florian; Chuang, Chia-Hsun; Pellejero-Ibanez, Marcos; Seo, Hee-Jong; Vargas-Magana, Mariana; Cuesta, Antonio J.; Percival, Will J. (+22 co-authors), [arXiv:1607.03145]
- 20. BOSS DR12 combined galaxy sample: The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: On the measurement of growth rate using galaxy correlation functions Satpathy, Siddharth; Alam, Shadab; Ho, Shirley; White, Martin; Bahcall, Neta A.; Beutler, Florian; Brownstein, Joel R.; Chuang, Chia-Hsun (+11 co-authors), [arXiv:1607.03148]
- 21. The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: cosmological analysis of the DR12 galaxy sample
  Shadab Alam, Metin Ata, Stephen Bailey, Florian Beutler, Dmitry Bizyaev, Jonathan A. Blazek, Adam S. Bolton, Joel R. Brownstein (+64 co-authors), [arXiv:1607.03155]
- 22. The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: Angular clustering tomography and its cosmological implications
  Salazar-Albornoz, Salvador; Sanchez, Ariel G.; Grieb, Jan Niklas; Crocce, Martin; Scoccimarro, Roman; Alam, Shadab; Beutler, Florian; Brownstein, Joel R. (+12 co-authors), [arXiv:1607.03144]
- 23. The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: double-probe measurements from BOSS galaxy clustering & Planck data towards an analysis without informative priors

  Pellejero-Ibanez, Marcos; Chuang, Chia-Hsun; Rubino-Martn, J. A.; Cuesta, Antonio J.; Wang, Yuting; Zhao, Gong-bo; Ross, Ashley J.; Rodriguez-Torres, Sergio (+23 co-authors including F. Beutler), [arXiv:1607.03152]
- 24. The large-scale 3-point correlation function of the SDSS BOSS DR12 CMASS galaxies Slepian, Zachary; Eisenstein, Daniel J.; **Beutler, Florian**; Cuesta, Antonio J.; Ge, Jian; Gil-Marin, Hector; Ho, Shirley; Kitaura, Franciso-Shu (+10 co-authors), [arXiv:1512.02231]

- 25. The Eleventh and Twelfth Data Releases of the Sloan Digital Sky Survey: Final Data from SDSS-III Alam, Shadab; Albareti, Franco D.; Allende Prieto, Carlos; Anders, F.; Anderson, Scott F.; Anderton, Timothy; Andrews, Brett H.; Armengaud, Eric (+296 co-authors including F. Beutler), ApJS 219.12A (2015), [arXiv:1501.00963]
- 26. Cosmological implications of baryon acoustic oscillation (BAO) measurements
  Aubourg, Eric; Bailey, Stephen; Bautista, Julian E.; **Beutler, Florian**; Bhardwaj, Vaishali; Bizyaev,
  Dmitry; Blanton, Michael; Blomqvist, Michael (+88 co-authors), Physical Review D. 92, 3516A (2015),
  [arXiv:1411.1074]
- 27. The SDSS-IV extended Baryon Oscillation Spectroscopic Survey: Overview and Early Data Dawson, Kyle S.; Kneib, Jean-Paul; Percival, Will J.; Alam, Shadab; Albareti, Franco D.; Anderson, Scott F.; Armengaud, Eric; Aubourg, Eric (+138 co-authors including F. Beutler), AJ, 151, 44D (2015), [arXiv:1508.04473]
- 28. SDSS-III Baryon Oscillation Spectroscopic Survey Data Release 12: galaxy target selection and large-scale structure catalogues
  Reid, Beth; Ho, Shirley; Padmanabhan, Nikhil; Percival, Will J.; Tinker, Jeremy; Tojeiro, Rita; White, Martin; Eisenstein, Daniel J. (+36 co-authors including F. Beutler), MNRAS 455.1553R (2016), [arXiv:1509.06529]
- 29. The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: Mock galaxy catalogues for the final BOSS Data Release
  Kitaura, Francisco-Shu; Rodriguez-Torres, Sergio; Chuang, Chia-Hsun; Zhao, Cheng; Prada, Francisco; Gil-Marin, Hector; Guo, Hong; Yepes, Gustavo (+15 co-authors including F. Beutler), MNRAS, 456.4156 (2016), [arXiv:1509.06400]
- 30. Fast and accurate mock catalogue generation for low-mass galaxies
  Koda, Jun; Blake, Chris; **Beutler, Florian**; Kazin, Eyal; Marin, Felipe, MNRAS, 459, 2118-2129 (2016),
  [arXiv:1507.05329]
- 31. The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: Baryon Acoustic Oscillations in the correlation function of LOWZ and CMASS galaxies in Data Release 12 Cuesta, Antonio J.; Vargas-Magana, Mariana; Beutler, Florian; Bolton, Adam S.; Brownstein, Joel R.; Eisenstein, Daniel J.; Gil-Marin, Hector; Ho, Shirley (+15 co-authors), MNRAS 457.1770C (2016), [arXiv:1509.06371]
- 32. The BOSS-WiggleZ overlap region II: dependence of cosmic growth on galaxy type
  Marin, Felipe A.; **Beutler, Florian**; Blake, Chris; Koda, Jun; Kazin, Eyal; Schneider, Donald P., MNRAS
  455.4046M (2016), [arXiv:1506.03901]
- 33. Eulerian BAO Reconstructions and N-Point Statistics
  Schmittfull, Marcel; Feng, Yu; **Beutler, Florian**; Sherwin, Blake; Chu, Man Yat, Physical Review D.92, 3522S (2016), [arXiv:1508.06972]
- 34. Modeling the reconstructed BAO in Fourier space Seo, Hee-Jong; **Beutler, Florian**; Ross, Ashley J.; Saito, Shun, [arXiv:1511.00663]
- 35. The 6dF Galaxy Survey: bulk flows on 50 70h<sup>-1</sup> Mpc scales
  Scrimgeour, Morag I.; Davis, Tamara M.; Blake, Chris; Staveley-Smith, Lister; Magoulas, Christina;
  Springob, Christopher M.; Beutler, Florian; Colless, Matthew (+7 co-authors) MNRAS 455.386S (2016),
  [arXiv:1511.06930]
- 36. The 6dF Galaxy Survey: Fundamental Plane Data
  Campbell, Lachlan A.; Lucey, John R.; Colless, Matthew; Jones, D. Heath; Springob, Christopher M.;
  Magoulas, Christina; Proctor, Robert N.; Mould, Jeremy R. (+8 co-authors including Florian Beutler),
  MNRAS 443.1231C (2014), [arXiv:1406.4867]
- 37. The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: including covariance matrix errors

  Percival, Will J.; Ross, Ashley J.; Sanchez, Ariel G.; Samushia, Lado; Burden, Angela; Crittenden, Robert; Cuesta, Antonio J.; Magana, Mariana Vargas (+14 co-authors including F. Beutler), MNRAS 439.2531P (2014), [arXiv:1312.4841]

- 38. The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: measuring  $D_A$  and H at z=0.57 from the baryon acoustic peak in the Data Release 9 spectroscopic Galaxy sample Anderson, Lauren; Aubourg, Eric; Bailey, Stephen; **Beutler, Florian**; Bolton, Adam S.; Brinkmann, J.; Brownstein, Joel R.; Chuang, Chia-Hsun (+32 co-authors), MNRAS 439.83A (2014), [arXiv:1303.4666]
- 39. The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: no detectable colour dependence of distance scale or growth rate measurements

  Ross, Ashley J.; Samushia, Lado; Burden, Angela; Percival, Will J.; Tojeiro, Rita; Manera, Marc; Beutler, Florian; Brinkmann, J. (+22 co-authors), MNRAS 437.1109R (2014), [arXiv:1310.1106]
- 40. The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: galaxy clustering measurements in the low redshift sample of Data Release 11

  Tojeiro, Rita; Ross, Ashley J.; Burden, Angela; Samushia, Lado; Manera, Marc; Percival, Will J.; Beutler, Florian; Brinkmann, J. (+17 co-authors), MNRAS 440.2222T (2014), [arXiv:1401.1768]
- 41. The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: Measuring growth rate and geometry with anisotropic clustering
  Samushia, Lado; Reid, Beth A.; White, Martin; Percival, Will J.; Cuesta, Antonio J.; Zhao, Gong-Bo; Ross, Ashley J.; Manera, Marc (+22 co-authors including **F. Beutler**), MNRAS 439.3504S (2014), [arXiv:1312.4899]
- 42. The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: single-probe measurements from CMASS anisotropic galaxy clustering
  Chuang, Chia-Hsun; Prada, Francisco; Pellejero-Ibanez, Marcos; Beutler, Florian; Cuesta, Antonio J.; Eisenstein, Daniel J.; Escoffier, Stephanie; Ho, Shirley (+18 co-authors), MNRAS 461 3781C (2016)
  [arXiv:1312.4889]
- 43. The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: Baryon Acoustic Oscillations in the Data Release 10 and 11 galaxy samples

  Anderson, Lauren; Aubourg, Eric; Bailey, Stephen; Beutler, Florian; Bhardwaj, Vaishali; Blanton, Michael; Bolton, Adam S.; Brinkmann, J (+57 co-authors), MNRAS 441.24A (2014), [arXiv:1312.4877]
- 44. The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: cosmological constraints from the full shape of the clustering wedges in the data release 10 and 11 galaxy samples Sanchez, Ariel G.; Montesano, Francesco; Kazin, Eyal A.; Aubourg, Eric; Beutler, Florian; Brinkmann, Jon; Brownstein, Joel R.; Cuesta, Antonio J. (+20 co-authors), MNRAS 440.2692S (2014), [arXiv:1312.4854]
- 45. Quasar-Lyman-alpha Forest Cross-Correlation from BOSS DR11: Baryon Acoustic Oscillations Font-Ribera, Andreu; Kirkby, David; Busca, Nicolas; Miralda-Escude, Jordi; Ross, Nicholas P.; Slosar, Anze; Rich, James; Aubourg, Eric (+35 co-authors including F. Beutler), JCAP, 05, 027F (2014), [arXiv:1311.1767]
- 46. The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: single-probe measurements and the strong power of f(z)σ<sub>8</sub>(z) on constraining dark energy Chuang, Chia-Hsun; Prada, Francisco; Cuesta, Antonio J.; Eisenstein, Daniel J.; Kazin, Eyal; Padmanabhan, Nikhil; Sanchez, Ariel G.; Xu, Xiaoying (+8 co-authors including F. Beutler), MNRAS 433.3559C (2013), [arXiv:1303.4486]
- 47. The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: cosmological constraints from the full shape of the clustering wedges

  Sanchez, Ariel G.; Kazin, Eyal A.; Beutler, Florian; Chuang, Chia-Hsun; Cuesta, Antonio J.; Eisenstein, Daniel J.; Manera, Marc; Montesano, Francesco (+14 co-authors), MNRAS 433.1202S (2013), [arXiv:1303.4396]
- 48. The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: measuring H(z) and  $D_A(z)$  at z=0.57 with clustering wedges
  Kazin, Eyal A.; Sanchez, Ariel G.; Cuesta, Antonio J.; **Beutler, Florian**; Chuang, Chia-Hsun; Eisenstein,
  Daniel J.; Manera, Marc; Padmanabhan, Nikhil (+13 co-authors), MNRAS 435.64K (2013), [arXiv:1303.4391]
- 49. The Tenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-III Apache Point Observatory Galactic Evolution Experiment

- Ahn, Christopher P.; Alexandroff, Rachael; Allende Prieto, Carlos; Anders, Friedrich; Anderson, Scott F.; Anderton, Timothy; Andrews, Brett H.; Aubourg, Eric (+230 co-authors including **F. Beutler**), ApJS 211, 17A (2014), [arXiv:1307.7735]
- 50. The Clustering of Galaxies around Radio-loud Active Galactic Nuclei
  Worpel, Hauke; Brown, Michael J. I.; Jones, D. Heath; Floyd, David J. E.; Beutler, Florian, ApJ
  772.64W (2013), [arXiv:1305.2673]
- 51. A combined measurement of cosmic growth and expansion from clusters of galaxies, the CMB and galaxy clustering Rapetti, David; Blake, Chris; Allen, Steven W.; Mantz, Adam; Parkinson, David; Beutler, Florian, MNRAS 432.973R (2013), [arXiv:1205.4679]
- 52. The WiggleZ Dark Energy Survey: mapping the distance-redshift relation with baryon acoustic oscillations Blake, Chris; Kazin, Eyal A.; Beutler, Florian; Davis, Tamara M.; Parkinson, David; Brough, Sarah; Colless, Matthew; Contreras, Carlos (+21 co-authors), MNRAS 418.1707B (2011), [arXiv:1108.2635]
- 53. Canonical Statistical Model and hadron production in e<sup>+</sup>e<sup>-</sup> annihilations
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