PHIL MARSHALL

Professional Preparation

University of Cambridge	Natural Sciences (Physics)	B. A. (Hons.) M. Sci. (class I), 2000
University of Cambridge	Astrophysics	Ph. D. (*"Bayesian Analysis of Clusters of Galaxies,"*), 2004
KIPAC, SLAC	Observational Cosmology	KIPAC Fellow, 2003–2006
Physics Dept., UCSB	Observational Cosmology	TABASAGO Fellow, 2006–2009
KIPAC, Stanford University	Observational Cosmology	Kavli Fellow, 2009–2010

Appointments

6/2013–onwards	Staff Scientist, SLAC National Accelerator Laboratory (Kavli Institute for Particle Astrophysics and Cosmology)
10/2010–5/2013	Royal Society University Research Fellow Department of Physics, University of Oxford

Selected Publications

1. Schneider, M. D., . . . , **Marshall, P. J.** et al
   Hierarchical probabilistic inference of cosmic shear
   ApJ accepted, 2015. `http://arxiv.org/abs/1411.2608`

2. Brewer, B. J., **Marshall, P. J.** et al
   The SWELLS survey - VI. Hierarchical inference of the initial mass functions of bulges and discs
   MNRAS, **437**, 1950, 2014. `http://arxiv.org/abs/1310.5177`

3. Suyu, S. H., . . . , **Marshall, P. J.** et al
   Cosmology from gravitational lens time delays and Planck data
   ApJ, **788**, 35, 2014. `http://arxiv.org/abs/1306.4732`

4. Collett, T. E., **Marshall, P. J.**, et al
   Reconstructing the lensing mass in the Universe from photometric catalogue data
   MNRAS, **432**, 679, 2013. `http://arxiv.org/abs/1303.6564`

5. Ivezic, Z., . . . , **Marshall, P. J.**, and the LSST Collaboration.
   LSST: from Science Drivers to Reference Design and Anticipated Data Products
   `http://arxiv.org/abs/0805.2366`,

6. **Marshall, P. J.** et al
   Space Warps – I. Crowd-sourcing the Discovery of Gravitational Lenses
   MNRAS accepted, 2015. `http://arxiv.org/abs/1504.06148`

7. Sonnenfeld, Alessandro, . . . , **Marshall, P. J.** et al
   The SL2S Galaxy-scale Lens Sample. V. Dark Matter Halos and Stellar IMF of Massive ETGs out to Redshift 0.8
   ApJ, **800**, 94, 2015. `http://arxiv.org/abs/1410.1881`

8. Busha, M. T., **Marshall, P. J.**, et al
   The Mass Distribution and Assembly of the Milky Way from the Properties of the Magellanic Clouds
   ApJ, **743**, 40, 2011. `http://arxiv.org/abs/1011.2203`

9. Oguri, M., & **Marshall, P.J.**
Gravitationally lensed quasars and supernovae in future wide-field optical imaging surveys
MNRAS, **405**, 2579, 2010. `http://arxiv.org/abs/1001.2037`

10. Suyu, S., **Marshall, P. J.**, Hobson, M. P. & Blandford, R. D.
A Bayesian analysis of regularised source inversions in gravitational lensing
MNRAS, **371**, 983, 2006. `http://arxiv.org/abs/0601493`

Synergistic Activities

2015–	Stanford Physics Graduate Lecture Course Leader, "Statistical Methods in Astrophysics"
2014–	Organizer and Lecturer, "Astro Hack Week"
2012–	Co-Principal Investigator, "Space Warps" citizen science project
2011	Workshop Organiser, "Cosmology Meets Machine Learning," NIPS, Granada, Spain.
2010–	Outreach Coordinator, University of Oxford Astrophysics Group and KIPAC

Collaborators and Affiliations

Collaborators (principals in bold):

Abbott, T., Abdalla, F. B., Adami, C., Aghamousa, A., **Agnello, A.,** Ajello, M., Allam, S., Amin, M. A., Annis, J., Armstrong, R., Auger, M. W., Baeten, E., Bamford, S., Banerji, M., **Bard, D. J., Barnabè, M.,** Barone-Nugent, R., Basa, S., Bastieri, D., Belles, P.-E., Benoist, C., Benoit-Lévy, A., Bertin, E., Beswick, R., Biviano, A., **Blandford, R. D., Bolton, A. S.,** Bonvin, V., Bosch, J., Boutigny, D., Bradley, L. D., **Brewer, B. J.,** Briain, D. Ó., Brooks, D., Brownstein, J. R., Buckley-Geer, E. J., Bulmash, D., Burgett, W. S., Burke, D. L., Cappi, A., Carretero, J., Chambers, K. C., **Chan, J. H. H.,** Chekhtman, A., **Cheung, C. C., Chiang, J.,** Chiueh, T., Ciprini, S., **Clowe, D.,** Coles, J., **Collett, T. E.,** Corbet, R. H. D., Cornen, C., Coupon, J., Courbin, F., Cox, B. E., Cunha, C. E., Cypriano, E. S., Czoske, O., D'Ammando, F., D'Andrea, C. B., **Dawson, W. A.,** Desai, S., Diehl, H. T., Dietrich, J. P., **Dobler, G.,** Doel, P., Donnarumma, A., Durret, F., **Dutton, A. A.,** Eifler, T. F., Erben, T., Erickson, N. J., Estrada, J., Falco, E. E., **Fassnacht, C. D.,** FenechConti, I., Finley, D., Flaugher, B., Fletcher, L. N., Fortson, L., Fosalba, P., Frieman, J., Garrington, S., **Gavazzi, R., Geach, J. E.,** Gentile, M., Gerdes, D. W., Gill, M. S. S., Giroletti, M., Green, P. J., Grove, J. E., Gruen, D., Guennou, L., Gutierrez, G., Halliday, C., Harrison, P. A., Harrington, K., **Hezaveh, Y. D., Hilbert, S., Hogg, D. W.,** Hojjati, A., Honscheid, K., Huff, E. M., Hughes, D. H., Ilbert, O., Ivison, R. J., Jackson, N., James, D. J., Jee, M. J., Johnston, D., Jordan, C., **Jullo, E.,** Just, D., Kacprzak, T., Kaiser, N., Kapadia, A., Kashyap, V., Kaviraj, S., Kelly, B. C., Kilbinger, M., Kind, M. C., **Kneib, J.-P., Koopmans, L. V. E.,** Kubo, J. M., Kuehn, K., Kuntzer, T., Kuropatkin, N., Küng, R., Lahav, O., **Lang, D.,** Larsson, S., LeBrun, V., Leauthaud, A., **Liao, K.,** LimaNeto, G. B., Lima, M., Limousin, M., **Linder, E., Lintott, C. J.,** Lin, H., Lin, Y.-T., Lott, B., Luo, W., **Lynn, S.,** Macmillan, C., Magnier, E. A., Maia, M. A. G., Makler, M., Mamon, G. A., Mandelbaum, R., Mandel, K., March, M. C., Marshall, J. L., Martinet, N., Martini, P., Mason, C. A., Masters, K. L., Maurogordato, S., Mazure, A., McKean, J., McMahon, R. G., Melchior, P., Melvin, T., Meng, X.-L., Metcalf, R. B., **Meyers, J. E.,** Meylan, G., Miller, C. J., Miller, G., Miller, L., Miquel, R., Miyatake, H., Montaña, A., Montero-Dorta, A. D., **More, A., More, S., Morganson, E.,** Morgan, J. S., **Moustakas, L. A.,** Mujica, R., Murphy, K. J., Muxlow, T., Márquez, I., Nakajima, R., Narayanan, G., Neto, A. F., NgoléMboula, F. M., Nichol, R. C., Nipoti, C., Nurbaeva, G., O'Brien, T., Odermatt, J., Ogando, R., **Oguri, M.,** Ojha, R., Okura, Y., Orienti, M., Ostrovski, F., Paget, E., Pandey-Pommier, M., Parrish, M., Paulin-Henriksson, S., Perkins, J. S., Plana, H., Plazas, A. A., Prabhu, T. P., Price, P. A., RathnaKumar, S., Razzano, M., Reil, K., Rhodes, J., Rix, H.-W., Romero-Wolf, A., Romer, A. K., Roodman, A., Rosell, A. C., Ross, N. P., Rostagni, F., Rowe, B., **Rozo, E.,** Rumbaugh, N., Russeil, D., Rusu, C. E., Rybak, M., **Rykoff, E. S., Saha, P.,** Sako, M., Sanchez-Argüelles, D., Sanchez, E., Santiago, B., Scargle, J. D., Scarpine, V., Schawinski, K., Schechter, P. L., Schirmer, M., Schlafly, E. F., Schloerb, F. P., **Schmidt, K. B., Schneider, M. D.,** Schrabback, T., Schubnell, M., Serjeant, S., Sevilla-Noarbe, I., Shafieloo, A., Shan, H., Sheldon, E. S., Shu, Y., Siemiginowska, A., Simet, M., **Simmons, B. D., Simpson, R.,** Skibba, R. A., Slezak, E., Smethurst, R. J., Smith, A. W., Smith, R. C., Snyder, C., Soares-Santos, M., Sobreira, F., **Sonnenfeld, A.,** Spiniello, C., Stalin, C. S., Starck, J.-L., Stiavelli, M., Suchyta, E., Sureau, F., **Suyu, S. H.,** Swanson, M. E. C., Tak, H., Tarle, G., Tecza, M., Tewes, M., Thaler, J., Thompson, D. J., Tonry, J. L., Trenti, M., **Treu, T.,** Tucker, D., Ulmer, M. P., VanWaerbeke, L., Vegetti, S., **Verma, A.,** Viero, M., Walker, A. R., Walter, F., Wang, W.-H., **Wechsler, R. H.,** Wilcox, J. K., Willett, K. W., Wilson, G. W., Wood, D. L., Wood, K. S., Wyithe, S., Yun, M. S., ZarbAdami, K., Zaritsky, D., Zeballos, M., Zhang, J., Zhang, Y., Ziegler, B., Zuntz, J.

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