

## Publication List: Matthew P.E. Schurch

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### REFEREED PUBLICATIONS

1. Coppejans D.L., Woudt P.A., Warner B., Macfarlane S.A., **Schurch M.P.E.**, Kotze M.M., Breytenbach H.B., Gulbis A.A.S., Coppejans R., *High-speed photometry of faint cataclysmic variables - VIII. Targets from the Catalina Real-time Transient Survey*, 2043, MNRAS, 437, 510.
2. Sturm R., Haberl F., Oskinova L.M., **Schurch M.P.E.**, Henault-Brunet V., Gallagher J.S., Udalski A., *Long-term evolution of the neutron-star spin period of SXP 1062*, 2013, A&A, 556, 139.
3. Armstrong R., Fender R., Nicolson G., Ratcliffe S., Linares M., Horrell J., Richter L., **Schurch M.P.E.**, Coriat M., Woudt P., Jonas J., Booth R., Fanaroff B., *A Return to Strong Radio Flaring by Circinus X-1 Observed with the Karoo Array Telescope Test Array KAT-7*, 2013, MNRAS, 433, 1951.
4. Townsend L.J., Drave S.P., Hill A.B., Coe M.J., Corbet R.H.D., Bird A.J., **Schurch M.P.E.**, *Contrasting behaviour from two Be/ X-ray binary pulsars: insights into differing neutron star accretion modes*, 2013, MNRAS, 433, 23.
5. Woudt P.A., Warner B., de Bud D., Macfarlane S., **Schurch M.P.E.**, Zietsman E., *High-speed photometry of faint cataclysmic variables - VII. Targets selected from the Sloan Digital Sky Survey and the Catalina Real-time Transient Survey*, 2012, MNRAS, 421, 2414.
6. **Schurch M.P.E.**, Coe M.J., McBride V.A., Townsend L.J., Udalski A., Haberl F., Corbet R.H.D., *Orbital Period Determinations for Four SMC Be/X-ray Binaries*, 2011, MNRAS, 412, 391.
7. Townsend L.J., Coe M.J., Corbet R.H.D., McBride V.A., Hill A.B., Bird A.J., **Schurch M.P.E.**, Haberl F., Sturm R., Pathak D., *The Orbital Solution and Spectral Classification of the High-Mass X-Ray Binary IGR J01054-7253 in the Small Magellanic Cloud*, 2011, MNRAS, 410, 1813.
8. Coe M.J., Bird A.B., Buckley D.A.H., Corbet R.H.D., Dean A.J., Finger M., Galache J.L., Haberl F., McBride V.A., Negueruela I., **Schurch M.P.E.**, Townsend L. J., Udalski A., Wilms J., Zezas A., *INTEGRAL deep observations of the Small Magellanic Cloud*, 2010, MNRAS, 406, 2533.
9. Townsend L.J., Coe M.J., McBride V.A., Bird A.J., **Schurch M.P.E.**, Corbet R.H.D., Haberl F., Galache J.L., Udalski A., *Be/X-ray binary SXP6.85 undergoes large Type II outburst in the Small Magellanic Cloud* 2010, MNRAS, 403, 1239.
10. Coe M.J., **Schurch M.P.E.**, McBride V.A., Corbet R.H.D., Townsend L.J., Udalski A., Galache J.L., *An X-ray and optical study of the new SMC X-ray binary pulsar system SXP7.92 and its probable optical counterpart, AzV285*, 2009, MNRAS, 394, 2191.
11. **Schurch M.P.E.**, Coe M.J., Galache J.L., Corbet R.H.D., McGowan K.E., McBride V.A., Townsend L.J., Udalski A., Haberl F., *High mass X-ray binary SXP18.3 undergoes the longest Type II outburst ever seen in the Small Magellanic Cloud*, 2009, MNRAS, 392, 361.
12. McBride V.A., Coe M.J., Negueruela I., **Schurch M.P.E.**, McGowan K.E., *Spectral distribution of Be/X-ray binaries in the Small Magellanic Cloud*, 2008, MNRAS, 388, 1198.

13. Galache J.L., Corbet R.H.D., Coe M.J., Laycock S., **Schurch M.P.E.**, Markwardt C., Marshall F.E., Lochner J., *A Long Look at the Be/X-Ray Binaries of the Small Magellanic Cloud*, 2008, ApJS, 177, 189.
14. Coe M.J., **Schurch M.P.E.**, Corbet R.H.D., Galache J., McBride V.A., Townsend L.J., Udalski A., *An optical & X-ray study of the counterpart to the SMC X-ray binary pulsar system SXP327*, 2008, MNRAS, 387, 724.
15. McGowan K.E., Coe M.J., **Schurch M.P.E.**, Corbet R.H.D., Galache J.L., Udalski A., *Optical and X-ray variability of two Small Magellanic Cloud X-ray binary pulsars - SXP46.6 and SXP6.85*, 2008, MNRAS, 384, 821.
16. McGowan K.E., Coe M.J., **Schurch M.P.E.**, McBride V.A., Galache J.L., Edge W.R.T., Corbet R.H.D., Laycock S., Buckley D.A.H., *The Chandra Small Magellanic Cloud Wing Survey - the search for X-ray binaries*, 2008, MNRAS, 383, 330.
17. McBride V.A., Coe M.J., Bird A.J., Dean A.J., Hill A.B., McGowan K.E., **Schurch M.P.E.**, Udalski A., Soszynski I., Finger M., Wilson C.A., Corbet R.H.D., Negueruela I., *INTEGRAL observations of the Small Magellanic Cloud*, 2007, MNRAS, 382, 743.
18. **Schurch M.P.E.**, Coe M.J., McGowan K.E., McBride V.A., Buckley D.A.H., Galache J.L., Corbet R.H.D., Still M., Vaisanen P., Kniazev A., Nordisiek K., *Optical follow-up of new Small Magellanic Cloud wing Be/X-ray binaries*, 2007, MNRAS, 381, 1561.
19. Coe M.J., Bird A.J., Hill A.B., McBride V.A., **Schurch M.P.E.**, Galache J., Wilson C.A., Finger M., Buckley D.A., Romero-Colmenero E., *Now you see it, now you don't - the circumstellar disc in the GRO J1008-57 system*, 2007, MNRAS, 378, 1427.
20. McGowan K.E., Coe M.J., **Schurch M.P.E.**, McBride V.A., Galache J.L., Edge W.R.T., Corbet R.H.D., Laycock S., Udalski A., Buckley D.A.H., *X-ray bright sources in the Chandra Small Magellanic Cloud Wing Survey - detection of two new pulsars*, 2007, MNRAS, 76, 759.
21. Negueruela I., **Schurch M.P.E.**, *A search for counterparts to massive X-ray binaries using photometric catalogues*, 2007 A&A, 461, 631.
22. Miyaji T., Sarajedini V., Griffiths R.E., Yamada T., **Schurch M.P.E.**, Cristbal-Hornillos D., Motohara K., *Multiwavelength Properties of the X-Ray Sources in the Groth-Westphal Strip Field*, 2004, AJ, 127 3180.

PAPERS IN  
SUBMISSION AND  
PREPARATION

1. Nagayama T., **Schurch M.P.E.**, ThunderKAT Collaboration, *SIRIUS Infrared observations of Circinus X-1*, In preparation.
2. **Schurch M.P.E.**, ThunderKAT Collaboration, *June 2012 Multiwavelength Campaign on Circinus X-1*, In preparation.
3. **Schurch M.P.E.**, *Swift Survey of the Small Magellanic Cloud: The High Mass X-ray Binary Population*, In preparation.
4. **Schurch M.P.E.**, *Swift Survey of the Small Magellanic Cloud: Point Source Catalogue*, In preparation.
5. **Schurch M.P.E.**, Coe M.J., McBride V.A., Townsend L.J., Udalski A., Haberl F., Corbet R.H.D., *Quasi Periodic Variations in Two 700s Be/X-ray Binaries in the Small Magellanic Cloud*, In preparation.

NON-REFEREED AND  
CONFERENCE  
PUBLICATIONS

1. **Schurch M.P.E.**, *Quasi Periodic Variations in Long Period Be X-ray Binaries*, 2012, African Skies, Vol. 16, p.129
2. Townsend L.J., Coe M.J., Corbet R.H.D., Galache J.L., **Schurch M.P.E.**, *RXTE finds a new 723s pulsar in the SMC (SXP723)*, 2011, The Astronomer's Telegram, 3538, 1.
3. **Schurch, M. P. E.**, *Quasi Periodic Variations in Long Period Be X-ray Binaries*, 2011, MEARIM-II Conference Proceeding, AFRICAN SKIES / CIEUX AFRICAINS, No. 16, July 2011.
4. Corbet R.H.D., Bartlett E.S., Coe M.J., McBride V.A., Townsend L.J., **Schurch M.P.E.**, Marshall F.E., *RXTE Detection of an 85.4 s X-ray Pulsar in the Direction of the SMC (SXP 85.4)*, 2010, The Astronomer's Telegram, 2813, 1.
5. Coe, M., Corbet R.H.D., McGowan K.E., McBride, V. A., **Schurch, M. P. E.**, Townsend L.J., Galache J.L., Negueruela, I., Buckley, D., *Optical properties of High-Mass X-ray Binaries (HMXBs) in the Small Magellanic Cloud*, 2009, The Magellanic System: Stars, Gas, and Galaxies, Proceedings of the International Astronomical Union, IAU Symposium, Volume 256, p. 367-372
6. Corbet R.H.D., Coe, M., McGowan K.E., **Schurch, M. P. E.**, Townsend L.J., Galache J.L., Marshall, F. E., *Properties of X-ray binaries in the Magellanic Clouds from RXTE and Chandra observations*, 2009, The Magellanic System: Stars, Gas, and Galaxies, Proceedings of the International Astronomical Union, IAU Symposium, Volume 256, p. 361-366
7. **Schurch, M. P. E.**, Udalski A., & Coe, M., *OGLE-III counterpart to SMC X-2 reveals 18.62 day binary period*, 2008, The Astronomer's Telegram, 1670, 1.
8. **Schurch, M. P. E.**, Udalski A., *Orbital period detected in new SMC Be/X-ray binary XMMU J005929.0-723703*, 2008, The Astronomer's Telegram, 1611, 1.
9. Corbet, R. H. D., Coe, M. J., Marshall, F. E., McBride, V. A., & **Schurch, M. P. E.**, *A Transient 7.92s X-ray Pulsar in the SMC (SXP 7.92)*, 2008, The Astronomer's Telegram, 1600, 1.
10. **Schurch M.P.E.**, Coe M.J., McGowan K.E., Corbet R.H.D., *SMC Pulsar SXP18.3 Breaks Record!*, 2007, A Population Explosion: The Nature and Evolution of X-ray Binaries in Diverse Environments, Florida, Poster.
11. **Schurch M.P.E.**, Coe M.J., *Infrared Observations of Be X-ray Binaries in the SMC*, 2006, NAM poster
12. Griffiths R.E., Miyaji T., Knudson Adam., **Schurch M.P.E.**, *Beyond the Limit of Deep X-ray Surveys: Galaxies or AGN?*, 2006, AUS, 230, 438, p. 438-441

SUCCESSFUL  
OBSERVING  
PROPOSALS

1. *Multiwavelength Coordinated Observations of Circinus X-1*, PI: **Schurch M.P.E** (SALT proposal ID:2012-1-RSA\_UKSC-003), Awarded: 46000s.
2. *Investigating the optical emission line profiles of highly eccentric Be/X-ray binaries*, PI: **Schurch M.P.E** (SALT proposal ID:2011-3-RSA\_UKSC-002), Awarded: 12000s.
3. *Spectral Identification and Radial Velocity study of HMXBs in the SMC and the Magellanic Bridge*, PI: **Schurch M.P.E** (SALT proposal ID:2011-3-RSA\_UKSC-004), Awarded: 4500s.
4. *High resolution Spectroscopy of Be/X-ray Binaries throughout Outbursts*, PI: **Schurch M.P.E** (SALT proposal ID:2011-3-RSA\_UKSC-001), Awarded: 15000s.

5. *Spectral Identification of New HMXBs in the Small Magellanic Cloud and the Magellanic Bridge*, PI: **Schurch M.P.E** (SALT proposal ID:2010-1-RSA\_UKSC-002)
6. *Searching for re-processed X-rays in GX 304-1*, PI: **Schurch M.P.E** (SALT proposal ID:2008-1-RSA\_UKSC-001)
7. *Optical Photometry of Magellanic Cloud HMXB's*, PI: **Schurch M.P.E** (SALT proposal ID:2007-1-RSA\_UKSC-007)
8. *Searching for re-processed X-rays in SMC HMXBs*, PI: **Schurch M.P.E** (SALT proposal ID:2007-1-RSA\_UKSC-006)
9. *Exploring accretion dynamics in Be/X-ray binaries in the SMC*, PI: Coe M.J. (ESO proposal ID:081.D-0183)
10. *The nature of the population of new X-ray sources in the Wing of the SMC*, PI: Coe M.J. (ESO proposal ID:079.D-0371)