



Contribution ID: 310

Type: Oral Presentation

Characterising new Be/X-ray binaries in the Large Magellanic Cloud

Thursday, 7 July 2016 11:30 (20 minutes)

**Abstract content (Max 300 words)
Formatting &
Special chars**

From the XMM-Newton X-ray survey of the Large Magellanic Cloud, 30 high mass X-ray binary (HMXB) candidates were identified. The work presented here identifies and characterises new Be/X-ray binaries (BeXBs) from this list of candidates through the nature of their optical counterparts. SALT Halpha; spectra were obtained for 19 of the candidates. From the observations, 13 of the candidates exhibited Halpha; emission, classifying them as Be/X-ray binaries. Additionally, power spectra of 11 OGLE light curves were produced in search of orbital periods of the newly discovered BeXBs.

**Apply to be
 considered for a student
 & award (Yes / No)?**

Yes

**Level for award
& (Hons, MSc,
 & PhD, N/A)?**

PhD

**Main supervisor (name and email)
and his / her institution**

Dr. Vanessa McBride
Email: vanessa@ast.uct.ac.za
UCT and SAAO

**Would you like to
 submit a short paper
 for the Conference
 Proceedings (Yes / No)?**

No

**Please indicate whether
this abstract may be
published online
(Yes / No)**

Yes

Primary author: Ms VAN JAARSVELD, Johanna (University of Cape Town)

Co-authors: Dr BUCKLEY, David (Southern African Large Telescope); Dr MCBRIDE, Vanessa (University of Cape Town & SAAO)

Presenter: Ms VAN JAARSVELD, Johanna (University of Cape Town)

Session Classification: Astrophysics (1)

Track Classification: Track D1 - Astrophysics