## **SAIP2016**



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## Long-term monitoring of TeV Blazars with the Watcher Robotic Telescope

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## Abstract content <br/> &nbsp; (Max 300 words)<br/> dry-<a href="http://events.saip.org.za/getFile.py/starget="\_blank">Formatting &<br/> &class="blank">Formatting &class="blan

Blazars are known to show large-scale multi-wavelength variability on the order of days to years. This variability often manifests as rapid flares that can show correlation over a broad wavelength range. Since flares happen suddenly rapid, follow-up observations must be scheduled if a more detailed multi-wavelength observation campaign is to be started. We report on the long term optical photometric monitoring of a selection of known and candidate TeV blazars observed with the Watcher Robotic Telescope since December 2014 in the V, R and i filters. In particular, we present results of five well known sources PKS 1510-089, AP Librae, PG 1553+113, PKS 2005-489, PKS 2155-304. A reduction pipeline is currently in development to help identify potential sources for rapid follow-up multi-wavelength observations and provide optical lightcurves to complement multi-wavelength observations. During the observation period PKS 1510-089 showed 2 outburst and a  $\Delta(V)$   $\tilde{}$  1.7 mag. PKS 2155-304 showed a  $\Delta(V)$  1 magnitude difference and a steady increase in magnitude. PG 1553+113 exhibits an outburst with a total magnitude change of  $\Delta(V)$   $\tilde{}$  0.6, while PKS 2005-489 presents one outburst ( $\tilde{}$  5.5 mag) in all the filters during the middle of the campaign. No flare events were observed for AP Librae

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Yes

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