

Abstract Submitted
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Studies in Stellar Spectroscopy using the Sommers-Bausch Observatory 24" Telescope DAVID SIMMONS, BRANDON BELL, RAYMON FURTH, Department of Astrophysical and Planetary Sciences, CU Boulder, GUY STRINGFELLOW, Center for Astrophysics and Space Astronomy, Boulder CO — Sommers-Bausch Observatory (SBO) was founded in 1953 and is located near downtown Boulder on the University of Colorado campus. In recent years, the telescope has been used largely as an undergraduate teaching facility. During the summer of 2012, we set out to investigate the current scientific capabilities of SBO by taking part in an international campaign monitoring the variable stars HD 168607 & HD 168625. The monitoring campaign, led by Dr. Stringfellow, involved six space and ground-based telescopes taking a combination of spectra and photometry. We also obtained spectra of a nova (Sgr. 2012 No.4) and a symbiotic star. The quality of these spectra indicate that the SBO 24" can still be used to contribute important scientific results to various topics in stellar spectroscopy, particularly regarding variable stars. Spectra of emission line stars can be obtained down to a limiting magnitude of $V \sim 11$ covering a wavelength range of 4705Å-6820Å with a resolving power of $R \sim 3600$. We will continue to use the SBO 24" to spectrally monitor novae, symbiotic stars, LBVs, and other variable stars.

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