

Be Star Spectra – The View From Mayhill, New Mexico

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Be stars and the BeSS database, October 2017

Mayhill, New Mexico, U.S.



My observatory



Mayhill, New Mexico, U.S.

- We are located at an altitude of ~2210m (7250 feet)
- The skies are very dark
- Seeing is typically <2 arcseconds
- Our humidity is very low
- Winter is our best observing time.
- Summer is our worst observing time because of monsoon rains
- There are at least 24 personal observatories on our mountain
- We share the mountain with New Mexico Skies (remote telescope hosting). New Mexico Skies has at least 30 telescopes.
- We are approximately 1 hour from Apache Point Observatory (home of the Sloan Digital Sky Survey) and Sunspot (former national solar observatory)

Current amateurs doing spectroscopy in Mayhill

- Ken Hudson and Joe Daglen
- We both have:
 - Observatories
 - Celestron C14 (357mm) telescopes
 - Paramount mounts
 - Lhires III spectrographs (Ken also has an Alpy and a Lisa)
- We both use ISIS
- Both of us have contributed to BeSS
- Both of us want to learn more and both of us want to encourage others

Why aren't more US amateur astronomers doing spectroscopy?

- Spectroscopy is hard
 - But, amateurs do many things that are hard
- Spectroscopy is science and science is hard
 - But, many amateurs do science – photometry / AAVSO
- Spectroscopy is expensive
 - But, many amateurs have expensive equipment
- There isn't anyone to ask for help
 - How do I get started?
 - How do I get better?

Why are the French so successful?

- Leaders like Christian, Valerie, Francois, Olivier, Coralie and many more - like everyone in this room
- A community of people willing to work together and help each other
- OHP – a wonderful opportunity for knowledge transfer
- BeSS – a very successful pro / am collaboration
- The ARAS Spectroscopy Forum
- In other words, the French have a strong support system for people just getting started and for people who want to improve

Sacramento Mountains Spectroscopy Workshop – Building a Community

- A spectroscopy boot camp (i.e., basic training) led by Francois Cochard
- The dates are February 16, 17 and 18, 2018
- Approximately 20 attendees
- We will have two or three telescopes with spectrographs for data collection
- We will process our data using ISIS
- Francois will present a series of lectures
- Katie Devine, PhD, Assistant Professor of Physics, College of Idaho will attend and give a presentation
- Stella Kafka, Director of the AAVSO will attend
- Goal #1: introduce new amateur astronomers to the joy of astronomical spectroscopy
- Goal #2: start a community of people interested in spectroscopy in the United States

Discussion – what else can we do?