



The BAA Spectroscopy Workshop, Newbury, 2016 October 28–30

As part of an initiative to encourage the use of spectroscopy by amateurs, the BAA recently awarded eight Ridley Grants to assist members in purchasing Alpy 600 spectrographs. All eight recipients attended a workshop held at St Cassian's Centre, Kintbury, near Newbury to help them get up to speed quickly on using the equipment and processing the data from it. They were joined by a further six people who already owned Alpys. Principal tutor at the workshop was François Cochard of Shelyak, the French company who manufacture the Alpy.

St Cassian's is a 16th century manor house set in spacious grounds in the Berkshire countryside which provides residential retreats for young people. Accommodation was basic but comfortable and the food was excellent and plentiful. We were very well looked after by the young staff. The Centre has a well-equipped conference centre, in part of which we held the workshop.

People travelled from as far away as Northumberland and Cornwall, arriving for dinner on Friday evening. After dinner, François gave a short talk setting the context for what we were trying to achieve over the weekend. On Saturday morning he covered the basic principles of light and spectroscopy and how spectroscopes worked, before describing the procedure of assembling and tuning an Alpy for optimum performance. At this point the tables disappeared



Attendees at the Spectroscopy Workshop. Left to right: David Salmon, George Faillace, Gareth Cottrell, Ann Davies, Richard Green, Alain Barthez, Francois Cochard, David Boyd, Steve Cuthbert, Nick Atkinson, Tony Rodda, Zoltan Trenovszki, John Bush, Mike Rushton, Andy Wilson, Kevin Gurney, Robin Leadbeater, Thomas Morris, Hugh Allen. (Photo: David Salmon.)

under an array of Alpy components, cameras, laptops and metres of cables as participants attempted to put this into practice.

François' intimate knowledge of the Alpy was invaluable as any problems people had in assembling their equipment were quickly resolved. Once the instruments were working and properly focused, we looked at the issues which arise in mounting the spectroscope on a telescope and using the guide camera to control fine pointing of the mount to keep the target star centrally positioned in the slit. Unfortunately the skies remained persistently cloudy over the whole weekend so no observing was possible, although with a small cash bar on the premises this did not seem to be a major problem.

On Sunday the focus turned to reducing spectroscopic data with the aim of creating properly calibrated spectral profiles which could potentially be useful for scientific analysis.

This was based around the use of Christian Buil's ISIS software. After an explanation of the process by François, we were each provided with a set of raw data files which we could use to practise the data reduction process ourselves. This proved to be the hardest part of the workshop as the procedure is complex but, once mastered, it is possible to use ISIS to process a night's spectroscopic data quickly and accurately. I then gave a short talk on possible targets which people could observe with their Alpy when they got home, and Andy Wilson brought the weekend to a close with a talk on the new BAA spectroscopic database he has been developing.

By the end of the weekend everyone had made considerably more progress with learning how to set up and use their Alpy than they would have achieved on their own – and that, after all, was the main purpose of the workshop.

David Boyd

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Setting up the Alpy spectrographs. (Photo: David Boyd.)