

## **Undergraduate Astronomy Field Trip (PHAS3332), 2008 Course organiser's report on the visit to Haute-Provence**

The 11th undergraduate astronomy field trip visited Haute-Provence Observatory (OHP) between Jan 24 and Feb 1. The field trip party consisted of eight students (Laura De Poitiers, Emile Doran, Maria Duffy, Omar Gardner, Kalle Karhunen, William Lyne, Ingo Waldmann and Laura Watson), two members of UCL staff (Stephen Boyle and Michael "Mick" Pearson) and one postgraduate teaching assistant (Iraklis Konstantopoulos). This was the first undergraduate astronomy field trip to include students from outside the Astronomy-related degree streams: Maria, Omar and Ingo being Natural Sciences students.

Travel was by rail from London St. Pancras to Avignon TGV, where the party was collected by minibus and car driven by OHP staff. All transport ran on time.

The party stayed at the Maison Jean Perrin, the residence at OHP, where all meals were consumed. Everything here was satisfactory, including catering for the one vegetarian member of the party.

Observing took place over six nights, starting on the evening of Jan 25 and finishing on the morning of Jan 31. The night of Jan 29 was entirely lost to cloud and rain, as were the hours 21:00 to 00:30 on Jan 30. Aside from these periods, very good observing conditions were enjoyed, so that the field trip enjoyed about 4.7 clear nights out of the 6 allocated.

Students observed in pairs on the 1.52-m and 1.20-m telescopes; each pair was scheduled to observe for 1.5 nights on both telescopes. When not observing, the students carried out data reduction using two laptop computers brought from ULO, augmented by laptop computers that two students had brought and connected to the ULO server laptop.

The students obtained data for the two projects set for the field trip: imaging photometry of variable stars, and high resolution spectroscopy in the wavelength range 483 nm to 489 nm of a sample of stars that were each both chemically peculiar and spectroscopic binary. In addition to this, sets of images were obtained with the 1.20-m telescope of the near-Earth object 2007 TU24 and a transit of an extra-solar planet. A spectrum of the transited star was obtained with the 1.52-m telescope, in the hope of checking (and possibly improving) the properties of the star reported in the literature.

The students worked consistently and with enthusiasm. The observing assistants and other OHP staff were helpful, and worked to overcome the potential barrier presented by language. I was pleased by the readiness of my colleagues Mick and Iraklis to help and advise the students.

The telescopes and equipment worked well for the most part. But I should say that the control software for the Aurelie spectrograph on the 1.52-m telescope is becoming temperamental, as might be expected for a system that operates under Windows 98.

Overall, I feel that the field trip went very well. My impression is that this year's visit to France was the most successful and enjoyable of all of the ones undertaken since 1998.

Stephen Boyle  
Organiser, PHAS3330

February 5, 2008.