GP5 Testing complementary spectroscopic mode identification methods: A hare-and-hound test of the pixel-by-pixel and the moment method

W. Zima¹, K. Kolenberg¹, M. Briquet² and M. Breger¹

We undertook a hare-and-hound test in order to examine the capability of the Moment Method and the Pixel-by-Pixel Method for the identification of pulsation modes in Delta Scuti stars. For this purpose, we created theoretical line profiles, simulating spectroscopic multi-site campaigns of two Delta Scuti stars - one with low and one with high v sin i, exhibiting pulsation frequencies of different degree ℓ and azimuthal order m. We tried to pinpoint the model input-parameters, including ℓ , m, intrinsic amplitude, and the inclination, which were not known by us, by applying both methods independently and using a combined method. In this poster, we present the results of this experiment.

¹ Institut für Astronomie, Universität Wien, Türkenschanzstraße 17, 1180 Vienna, Austria

² Istituut voor Sterrenkunde, Celestijnenlaan 200B, 3001 Heverlee, Belgium