

M97 The Cosmic Owl - A Closer Look

One of the fainter objects in Messier's catalogue is the planetary nebula M97. About 2600 light-years away, the object is located at the bottom of Big Dipper's bowl.

Its round shape together with the placement of two large, dark "eyes" do suggest the face of an owl. Under good conditions it was never an issue to observe the "eyes" using my 12" F5 dobson. What I never managed until recently was to see the central star.

Last week in the Alps I'd very good transparency and good seeing conditions. I was able to see the central star using averted vision (about 50% of the time). The observation was confirmed by other 3 colleagues (Uwe, Frank and HaJü).

Here's the sketch I took:



I used an exit pupil of 1.8mm (167x) to get out some details related to the eyes. The central star appeared using higher power (300x) having an ep of 1mm (I didn't use any filter).

Having a closer look to deep images of the owl, there are two more stars which should be reachable with a little bit more aperture. I was not able to spot them, even if they seem not to be much fainter compared to the central star.

But this isn't the end of the story yet.

Looking to the deep image of capella observatory (see link), there are more very, very faint stars.



They seem to be outside of what can be visually reached?

However, I'd be interested in what are your experiences with the cosmic owl, whatever aperture you may be used.

ps:

About 4' southeast of the center of M97, there is the faint galaxy PGC 34279. I didn't note it but the galaxy should also be within the range of medium-size scopes.