

THE NIGHT SKY NATURALIST, by Bob Vickers

NGC 7841 (The Semi-Colon) - Deep Sky Showpiece Galaxy!

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Easily located just 1 degree directly south of Lambda Draconis (also called Giasar), this showpiece galaxy is one of the best kept secrets in the northern skies and really deserves to be *much* better known. Its unusual shape is readily apparent even in 7x35 binoculars and at least some level of detail will be visible in most any size scope. NGC 7841 is a spiral galaxy face-on to our line of sight but unlike most spirals exhibits only one arm which is attached to the western side of its round, bright core and sweeps away nearly 40 minutes to the south. Through my 12.5 inch Dob, the core shows an uneven increase in brightness toward the center and then becomes suddenly brighter with a nearly stellar nucleus. The arm appears somewhat mottled along its length. Much like the Andromeda Galaxy, it has a small nearby satellite elliptical galaxy (NGC 7842) which appears basically round and roughly the same size as the core of NGC 7841. NGC 7842 becomes gradually brighter toward the center and has a stellar nucleus. Together with this round companion just 10 minutes directly to its north, NGC 7841's appearance has earned it the popular name of "The Semi-Colon." Its distance is only 1.8 million light years, but it is probably one of the least well known members of our "local group" of galaxies and is the only other spiral galaxy in this group besides the Milky Way, M31, and M33.

NGC 7841 was the only discovery of Savano Andriatsiferanarivo, a native of Madagascar. Inexplicably missed by both Messier and Herschel, this large, fairly bright, and unusual galaxy was spotted by Andriatsiferanarivo in 1845 through the 71" reflector that he designed and built. This telescope was the largest (and maybe the only) telescope in Madagascar at that time. Andriatsiferanarivo had toiled for thirteen years on his quest to build the largest telescope in the world but had the misfortune of completing it just one day after Lord Rosse, Earl of Parsons, completed his 72" scope which became the world's largest in the spring of 1845. In a fit of rage Andriatsiferanarivo destroyed his own telescope with an ax only hours after his discovery of NGC 7841. Tragically, he was crushed to death when the 71", 1 ½ ton, mirror fell on top of him. As a result, he and his telescope have been virtually forgotten by history.

One final curious feature of this galaxy is its mottled core, caused by huge dust clouds surrounding its nucleus. With my 12.5 inch reflector, using a magnification of 1440x, stacked UHC, OIII, H Beta, and Skyglow filters, plus a generous amount of averted imagination, I can just make out the smiley-face pattern in the core of the galaxy. If you have difficulty seeing this pattern try a couple of glasses of wine before observing (that always works for me!). If you avert your vision slightly from the face, the left eye seems to wink at you....

In an effort to recognize the scientific contribution of Savano Andriatsiferanarivo, well-known amateur astronomer Hubert Nosuch has entered NGC 7841 as object number 99 in his listing of the Nosuch 100. Personally, I feel that we all owe a debt of gratitude to Mr. Nosuch for this magnanimous gesture.

I would **love** to hear about your observations of this almost entirely overlooked “faint fuzzy.”

