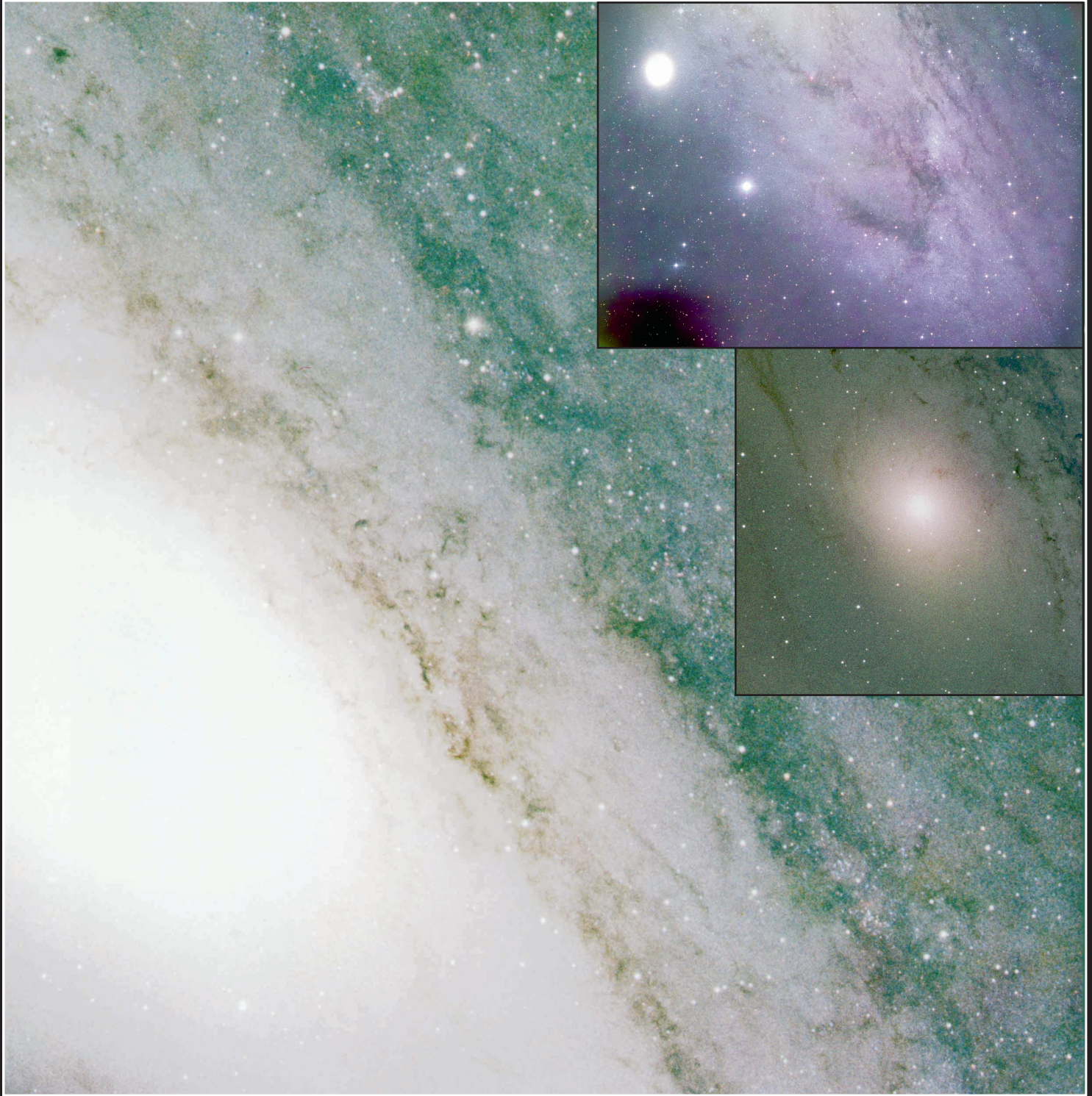


The Andromeda Galaxy



Isaac Newton Telescope + Photographic Prime Focus Camera



The nearest comparable spiral galaxy to the Milky Way is M31 (NGC 224), the great galaxy in Andromeda. It is visible to the unaided eye and has been known as a curious hazy patch since ancient times. Only in the last 75 years has its nature as a distant city of stars like the Milky Way become apparent. Upper right picture shows the central part of M31, the huge mass of stars that are in orbit around its nucleus. Silhouetted against this starry background are tangled sheets and curtains of dust, very reminiscent of dust clouds we see in our own galaxy. At the heart of M31 is a tiny, bright nucleus, seen to be slightly elongated (middle right picture). Hubble Space Telescope pictures show the nucleus to be a double structure, possible the remains of the nucleus of another galaxy which has now been almost completely absorbed in M31. Around the binary nucleus swirls a huge cloud of mostly old, faint stars. These stars are unresolved on the plates that were used to make the middle right picture and have been removed by a photographic process known as 'unsharp masking'.

Picture by David Malin (AAO).

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