

The Hickson 44 Galaxy Group

The Hickson 44 Galaxy Group is on the edge of the Virgo Supercluster of galaxies. The Canadian astronomer Paul Hickson and colleagues identified some 100 compact groups of galaxies, this one being the 44th. The four prominent galaxies seen in this image are about 70-80 million light-years distant, toward the constellation Leo (see the annotated image). The two spiral galaxies in the center of the image are edge-on NGC 3190 with its distinctive, warped dust lanes, and the S-shaped NGC 3187, also showing significant tidal disruption of its arms. Also note the bright elliptical, NGC 3193, above and right of the center. The spiral in the lower left corner is NGC 3185, the 4th member of the Hickson group. Like other galaxies in Hickson groups, these show signs of distortion and enhanced star formation, evidence of a gravitational tug of war that will eventually result in galaxy mergers on a cosmic timescale. For scale, NGC 3190 is about 75,000 light years across at the estimated distance of Hickson 44. There are many more galaxies in the field. Upon close inspection of the image and you will see the background also reveals a multitude of small distant galaxies, located hundreds of millions of light years away (a few are annotated using the PGC galaxy catalog).

146 x 600 seconds of RGB, collected over several days in March and April, 2023. Total exposure time 24.3 hours, all processed in PixInsight.

Thanks to Tom Engwall for mentioning the ColorMask script in PixInsight as it was somewhat useful for this image as well.

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