
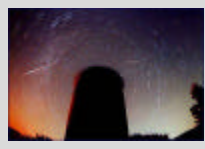
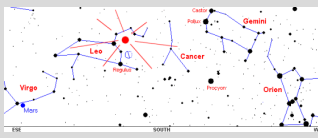



AST1002


 **Leonid meteor shower!**

- Possibly between 100 and 700 meteors per hour
- Nov 17 02:50 AM EST
- Nov 18 02:51 AM EST



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Galaxies and Beyond

Chapter 16
Our Galaxy

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 **Our Galaxy**

- The Milky Way
 - Visible as band around the entire sky
 - Seen as individual stars by Galileo
 - Brightest in Sagittarius
 - Best seen from southern hemisphere



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 **Our Galaxy**

- The Milky Way
 - Hard to see “the forest for the trees”
 - Looking out from inside
 - View in visible obscured by gas and dust




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 **Our Galaxy**

- The view from outside
 - Large flat disk
 - Sun (about 2/3rds of the way out)
 - Spiral arms
 - Central bulge
 - Spherical halo
 - Halo stars
 - Globular clusters



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 **Our Galaxy**

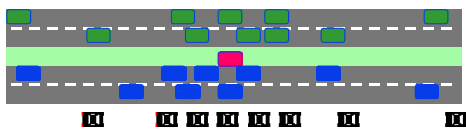
- Census of stars
 - Halo
 - Many old stars, few young stars
 - Very low heavy element abundance (as low as 0.02%)
 - Almost no gas
 - Disk (sun's neighborhood)
 - Stars of all ages except very young

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 **Spiral Arms = Density Waves**

- The arms are the location of concentrations of gas called **density waves**

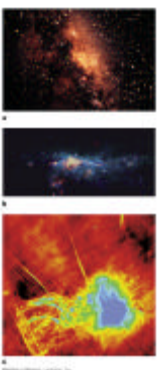


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 **Our Galaxy**

- The Galactic Center
 - A cluster of millions of stars
 - Intense magnetic field
 - Bright radio source
 - Black hole?
 - Where are the X-rays?



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Questions and/or Comments?

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or visit <http://www.astro.ufl.edu/~oliver/>