GALAXIES, GALAXIES!Image: Colspan="2">Image: Colspan="2"Image: Colspan="2">Image: Colspan="2"Image: Colspan="2"<t







Elliptical Galaxies

Elliptical galaxies are affectionately called "E" galaxies. They can be extremely large and massive. This galaxy is 2 million light years across.







Disks vs. Bulges	
	-
Disks:	
 flattened syste 	ms that rotate
• orbits of stars	and gas are "circular", rotating about disk axis
 star formation 	is on-going; it is can be fairly constant over the age of the galaxy
 gas and dust m 	ass fraction is roughly 10-50% of full disk
• due on-going s	star formation, ages of stars widely range from age of galaxy to new
• spiral arms for	m as sustained density waves; where majority of star formation occurs
Bulges:	
• spheriodal sys	tems with little or no rotation
• orbits of stars	are randomly oriented and highly eccentric (some are radial)
 star formation 	complete long ago; gas consumed efficiently long ago
	re mainly old; most as old as the galaxy
• ages of stars a	now and it has been converted to stars already
 ages of stars a very little to k 	now gas, it has been converted to stars already





