

**Meeting Date**

September 10, 2023

**Night Begins**

9:32 PM. EDT

*Note: Astronomical Twilight Ends***Solar Noon / Midnight**

1:39 EDT

*Note: on Meeting Date***Moon Quarters**

Last 09/06, New 09/14, First 09/22, Full 09/29

**Darkest Evenings**

09/04 – 09/20

*Note: 2 days before Last Quarter thru 2 days before First Quarter***Viewing Resources**

Evening Sky Maps

<http://skymaps.com/>

Astronomy Forecast

<https://www.cleardarksky.com/>

RASC Finest NGC Objects

<https://www.rasc.ca/fineest-ngc-objects>

A. Clarke's Discovering Astronomy

<https://discovering-astronomy.eu/index.html>**RASC Finest NGC****Focus: 21 Hours RA Thru 22 Hours RA***Note: West to East***Featured Objects**

Primary ID	RASC Number	Alternate ID	Con	Type	RA 2000	Decl 2000	Mag	Size
NGC 7129	109	Small Cluster	Cep	RN	21h43m00.0s	+66°07'00"	11.5	2.7'
		Faint reflection neb. around sparse cluster						
NGC 7027	101	Magic Carpet	Cyg	PN	21h07m01.7s	+42°14'10"	9.6	18"
		Unusual protoplanetary nebula						
NGC 7331	3	Deer Lick Group	Peg	Gal	22h37m04.3s	+34°24'59"	10.2	9.1'x 3.4'
		!! Large, bright spiral galaxy						
NGC 7009	1	Saturn Nebula	Aqr	PN	21h04m10.9s	-11°21'48"	8.3	28"
		!! Saturn Nebula; small bright oval						
NGC 7293	2	Helix	Aqr	PN	22h29m38.5s	-20°50'14"	6.3	16.0'
		!! Helix Nebula; large, diffuse; use filter						

**Urban & Small Scope Bonus****Focus: 21 Hours RA Thru 22 Hours RA***Note: West to East*A selection of double stars from Agnes Clarke's excellent book, *Discovering Double Stars (for Northern light-polluted skies)***Featured Double Stars**

Primary ID	Magnitude	Separation	PA	Description
Beta Cep, page 40	3.2   7.9	13.3"	249	Brilliant white primary, faint blue companion
61 Cyg, page 222	5.2   6.0	28"	146	An orange-red pair with wide separation
Delta Cep, page 224	3.9   6.3	41"	192	A bright, widely separated yellow and blue
STF 2894, page 225	6.1   8.3	15.6"	194	Yellow primary close to a faint blue secondary.
STT 437, page 226	6.2   7.4	2.5"	28	A balanced yellow-orange pair
1 Peg, page 229	4.2   9.3   9.6	36"   5.3"	312 151	A triple system, with a brilliant orange primary
STF 2841, page 232	6.4   7.9	22.3"	110	A wide yellow-blue (green) pairing
Zeta Aqr, page 239	4.3   4.5	2.3"	183	A balanced, tight pair of white stars
12 Aqr, page 242	5.9   7.3	2.8"	1	A very tight yellow-blue system