1
00:00:00,000 --> 00:00:01,802
[cheering] [intense music]

2
00:00:01,802 --> 00:00:06,473
The madness of March has begun!
Who will rise through the ranks

3
00:00:06,473 --> 00:00:09,910
and come out victorious? I'm
referring of course to the

4
00:00:09,910 --> 00:00:13,547
exciting, nail-biting challenge
of amateur astronomy.

5
00:00:13,547 --> 00:00:16,116
Sky-watching enthusiasts across
the northern hemisphere are

6
00:00:16,116 --> 00:00:19,219
prepping their telescopes for
this year's Messier marathon,

7
00:00:19,219 --> 00:00:23,423
where they try to find as many
of the 110 Messier objects as

8
00:00:23,423 --> 00:00:29,096
they can in just one night. To
celebrate, NASA's Hubble Space

9
00:00:29,096 --> 00:00:34,234
Telescope is releasing 12 new
images of Messier objects.

10
00:00:34,234 --> 00:00:37,571
Charles Messier was a French
astronomer in the 1700s and

11

00:00:37,571 --> 00:00:41,675
early 1800s. He was interested
in discovering comets, but it

12
00:00:41,675 --> 00:00:44,678
took time to determine which
fuzzy features in the sky were

13
00:00:44,678 --> 00:00:48,715
new, moving objects and which
were permanent and stationary.

14
00:00:48,715 --> 00:00:52,352
So, Messier compiled a list of
the permanent features to make

15
00:00:52,352 --> 00:00:56,556
it easier to identify the new
comets. This list, now known as

16
00:00:56,556 --> 00:01:00,027
the Messier catalog, includes
star clusters, nebulas, and

17
00:01:00,027 --> 00:01:03,096
galaxies, and it’s popular with
amateur astronomers because

18
00:01:03,096 --> 00:01:06,033
they’re all relatively bright
and findable with a backyard

19
00:01:06,033 --> 00:01:10,170
telescope. There are a few weeks
from mid-March to early April

20
00:01:10,170 --> 00:01:13,040
when it’s possible for people in
the northern hemisphere to

21

00:01:13,040 --> 00:01:18,078
observe all 110 Messier objects
in one night. This is best done

22
00:01:18,078 --> 00:01:22,916
close to the time of a new moon,
which in 2018 is March 17th.

23
00:01:22,916 --> 00:01:26,219
Many astronomy clubs across the
globe organize Messier marathons

24
00:01:26,219 --> 00:01:29,323
around this time, and only
people with the most skill,

25
00:01:29,323 --> 00:01:33,660
endurance, will power, good
luck, and darkest skies manage

26
00:01:33,660 --> 00:01:38,398
to find all 110 objects before
the sun rises. The Hubble Space

27
00:01:38,398 --> 00:01:42,235
Telescope has plenty of skill
and the darkest sky possible,

28
00:01:42,235 --> 00:01:46,340
but it doesn’t have the agility
to point toward 110 objects in

29
00:01:46,340 --> 00:01:50,510
different parts of the sky
within 12 hours. Over the years

30
00:01:50,510 --> 00:01:53,947
though, Hubble has provided
fantastic zoomed-in images of

31

00:01:53,947 --> 00:01:57,718
most of the Messier catalog.
These 12 new images were

32
00:01:57,718 --> 00:02:01,188
recently processed from existing
Hubble data and compiled into

33
00:02:01,188 --> 00:02:04,391
Hubble's gallery of Messier
objects to share the excitement

34
00:02:04,391 --> 00:02:08,095
of stargazing, and let amateur
astronomers compare their views

35
00:02:08,095 --> 00:02:11,898
to those of Hubble. The 12 new
images include six spiral

36
00:02:11,898 --> 00:02:15,535
galaxies, four elliptical
galaxies, and two globular

37
00:02:15,535 --> 00:02:19,306
clusters. M58 was one of the
first galaxies recognized to

38
00:02:19,306 --> 00:02:24,411
have a spiral shape, and is the
most distant Messier object. M90

39
00:02:24,411 --> 00:02:27,414
is one of the few galaxies to be
moving toward our own Milky Way

40
00:02:27,414 --> 00:02:31,551
galaxy rather than away. Though
Messier himself may have been

41

00:02:31,551 --> 00:02:34,921
disappointed that these objects
weren’t comets, each of them has

42
00:02:34,921 --> 00:02:39,026
a unique story to tell. Whether
you use a space observatory like

43
00:02:39,026 --> 00:02:42,629
Hubble, a small telescope on the
ground, binoculars, or just your

44
00:02:42,629 --> 00:02:45,866
own eyes, there are always
interesting things to look at in

45
00:02:45,866 --> 00:02:47,868
the night sky.