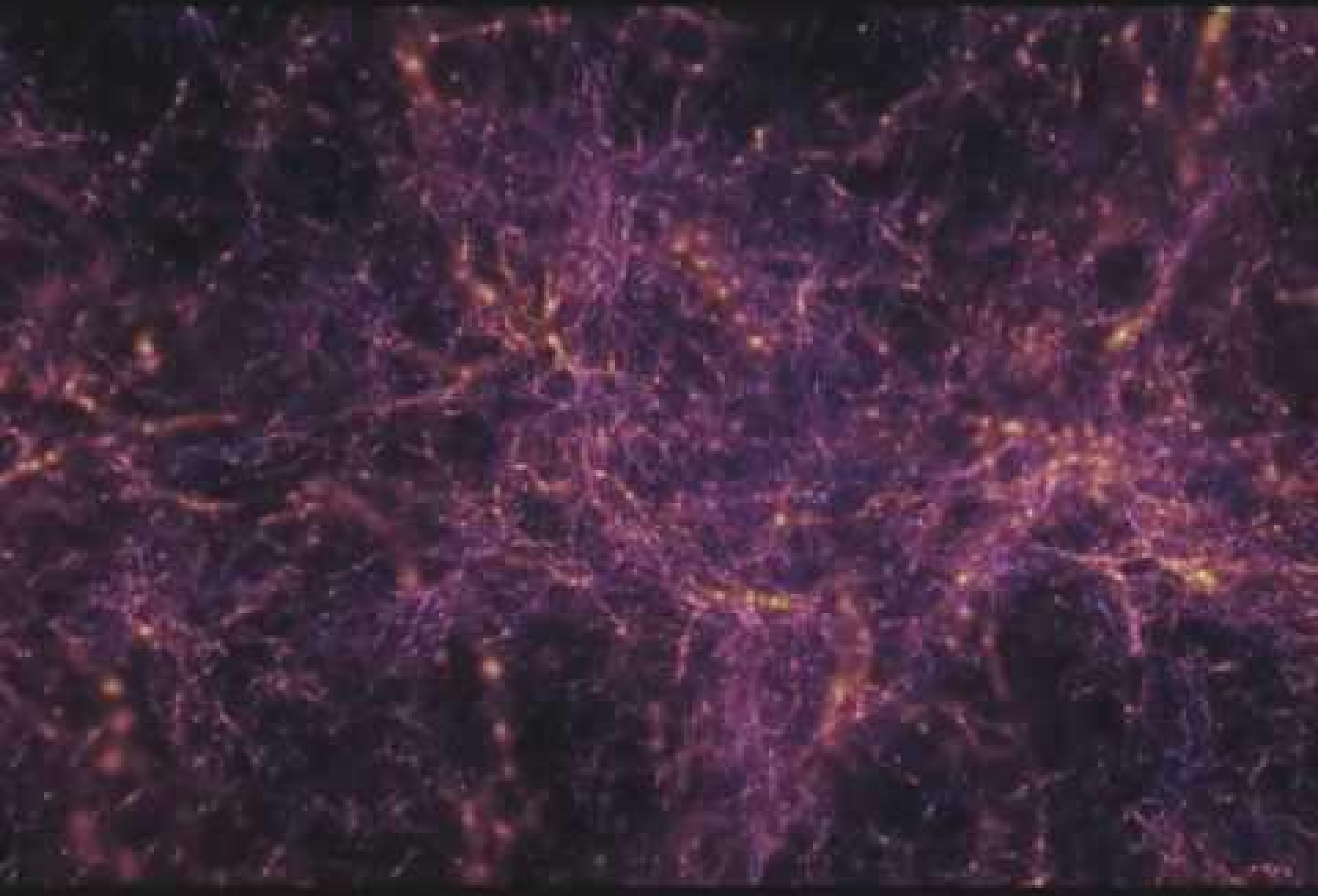

1
00:00:05,670 --> 00:00:03,669
new findings by nasa's chandra x-ray

2
00:00:07,590 --> 00:00:05,680
observatory have provided a major

3
00:00:09,910 --> 00:00:07,600
advance in understanding a type of

4
00:00:11,430 --> 00:00:09,920
supernova believed critical to studying

5
00:00:13,589 --> 00:00:11,440
dark energy

6
00:00:17,109 --> 00:00:13,599
a zoom into this composite image of the

7
00:00:18,790 --> 00:00:17,119
andromeda galaxy also known as m31 shows

8
00:00:21,269 --> 00:00:18,800
astronomers that the merger of what's

9
00:00:24,550 --> 00:00:21,279
left of two dense stars is the likely

10
00:00:27,029 --> 00:00:24,560
cause of many type 1a supernovas

11
00:00:29,029 --> 00:00:27,039
type 1a supernovas have been used to

12
00:00:31,029 --> 00:00:29,039
measure the accelerated expansion of the

13
00:00:33,830 --> 00:00:31,039

universe astronomers believe that

14
00:00:36,069 --> 00:00:33,840
expansions being caused by dark energy

15
00:00:38,470 --> 00:00:36,079
something they know very little about

16
00:00:41,030 --> 00:00:38,480
theorizing that this mystery mass energy

17
00:00:42,229 --> 00:00:41,040
makes up as much as 74 percent of the

18
00:00:47,110 --> 00:00:42,239
universe

19
00:00:49,270 --> 00:00:47,120
launched by sts-93 on july 23 1999 the

20
00:00:51,910 --> 00:00:49,280
chandra x-ray observatory is one of

21
00:00:54,069 --> 00:00:51,920
nasa's great observatories

22
00:00:56,709 --> 00:00:54,079
it has obtained unprecedented x-ray

23
00:00:58,950 --> 00:00:56,719
images of exotic environments that help