The Telescope Beyond the Atmosphere　一窥银河奥妙：哈伯太空望远镜

On April 25th, 1990, the dreams of **astronomers** around the world were realized when the Hubble Space **Telescope** was released from the Space Shuttle Discovery into Earth's orbit. **Stargazers** and scientists had, for the first time, the ability to see farther into space than ever before. Named after Edwin Hubble, a man who was the first to observe **galaxies** beyond our own, the space telescope would lead us into a new age of discovery.

1990 年 4 月 25 日，当发现号航天飞机将哈伯太空望远镜送入地球轨道时，全世界天文学家的梦想于焉实现。观星者与科学家第一次能看到更遥远的太空。「哈伯」太空望远镜得名自埃德温．哈伯，第一位发现其他银河之人。哈伯太空望远镜带领我们进入一个新的发现纪元。

The Hubble Telescope has an **infinitely** better **perspective** than a ground telescope, because its view is not **disrupted** by the Earth's atmosphere. As the telescope orbits our planet – once every 97 minutes – its mirrors capture light which is directed toward scientific instruments. These instruments process the information to create the breathtaking images for which the Hubble is known.

因哈伯太空望远镜不会被地球大气层遮住，故较地表的望远镜能有更辽阔绝佳的视野。当望远镜以每 97 分钟环绕地球一圈时，它的镜面吸收光线，光线再被导入科学仪器。这些仪器将数据加以处理并制造出哈伯太空望远镜引以闻名的惊人影像。

Since Hermann Oberth first conceived the idea for a space telescope in 1923, scientists, astronomers, and **astrophysicists** worked together to make it possible. In 1977, NASA (National **Aeronautics** and Space Administration) and the European Space Agency had the plan for the Hubble, and **Congress** agrees to fund the project.

自从赫尔曼．奥伯特于 1923 年有了制造太空望远镜的想法，科学、天文学家与天体物理学家通力合作使其成真。1977 年，美国国家航空暨太空总署与欧洲太空总署有了建造哈伯太空望远镜的计划，此计划并获致国会拨款。

Twenty years of dedication **paid off**, as the Hubble revealed the existence of dark energy, the age of the universe (13-14 billion years old), and how galaxies are formed, **to name but a few** of its groundbreaking discoveries.

20 年的努力终于有所回报。哈伯太空望远镜在运转期间，揭示了暗能量的存在、宇宙的年龄（一百三十至到一百四十亿岁）、银河如何形成与其他开创性的发现。

The Hubble **ushered in** an era of understanding and enabled us to see the universe in ways never before possible. As the Hubble **approaches** the end of its life, a new era is coming: the James Webb Space Telescope is **standing by** to take the Hubble's place. The Hubble's legacy, though, will be with us for a long, long time.

哈伯太空望远镜开创了一个知识时代，并让我们可用前所未有的方式观看宇宙。当哈伯太空望远镜寿终正寝时，新的时代也正在来临：詹姆斯．韦伯太空望远镜正准备取代哈伯太空望远镜，但哈伯太空望远镜的传奇将会永世流传。

—by Alice Davis

Vocabulary

astronomer [ə ` strɑnəmə˞] n.天文学家

stargazer [` stɑr˛gezə˞] n.看星星的人；占星师；天文学家

galaxy [` gæləksɪ] n.银河

infinitely [` ɪnfənɪtlɪ] adv. 无限地，无穷地；极其

perspective: [pə˞ ` spɛktɪv] n. 远景，前景，前途，展望，透视图 a view or vista

disrupt [dɪs ` rʌpt] v.使混乱，使中断

astrophysicist [˛æstro ` fɪzɪsɪst] n.天体物理学家

aeronautics [˛ɛrə ` nɔtɪks] n.航空学；飞行术

Congress [` kɑŋgrəs]（C-）美国国会

approach [ə ` protʃ] v.即将达到

Idiom

pay off: 【口】(尤指冒风险的政策、做法等)带来好结果，成功 to result in success

to name but a few: 仅以这些为例 giving only these as examples, even though more could be cited

usher [` ʌʃə˞] **in something**: 领进；引进 to signal the beginning of something

stand by: 准备行动 to be ready or available to act