



# eTwinningStars: shining together

## TIMELINE CARDS





**HIPATIA**

360 - 415 A.D

First woman astronomer.  
She improved the design of the primitive  
astrolabes -instruments to determine the  
positions of the stars.



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**Wang Zhenyi**

1797

She proved how equinoxes  
move and how to calculate  
their movement.



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their movement.



## CAROLINE HERSCHEL

1786

The first woman who discovered a comet called C/1786 P1. Then, she discovered seven comets more.



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## ANTONIA MAURY

1897

She devised a new system of stellar classification that would become the basis of modern astrophysics.



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**Agnes Mary Clerke**

1903

She was elected an honorary member of the Royal Astronomical Society.



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**CECILIA PAYNE-GAPOSCHKIN**

1925

She discovered that stars are composed mainly by hydrogen and helium.



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She discovered that stars are composed mainly by hydrogen and helium.



**Yevgenia Yakovlevna Bugoslavsk**

1936

She determined the proper motions of stars in the eastern branch of the dark nebulae of Perseus, Taurus and the Orion Nebula.



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She determined the proper motions of stars in the eastern branch of the dark nebulae of Perseus, Taurus and the Orion Nebula.



**Henrietta Swan Leavitt**

1912

She discovered how to measure stellar distances.



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She discovered how to measure stellar distances.



**ANTONIA FERRÍN**

1963  
She became the first Spanish woman to defend a thesis on astronomy.



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She became the first Spanish woman to defend a thesis on astronomy.



**Jocelyn Bell Burnell**

1967  
She discovered the first radio pulsars.



**Jocelyn Bell Burnell**

She discovered the first radio pulsars.

A photograph of Margaret Geller, an older woman with curly grey hair and glasses, smiling and resting her chin on her hand. The portrait is set within an oval frame on a dark blue and gold decorative card.


**Margaret Geller**

1989  
She discovered the existence of a  
Great Wall of galaxies in space  
that stretches at least 500  
Million light-years.

A photograph of Margaret Geller, an older woman with curly grey hair and glasses, smiling and resting her chin on her hand. The portrait is set within an oval frame on a dark blue and gold decorative card.


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Great Wall of galaxies in space  
that stretches at least 500  
Million light-years.

A black and white illustration of Josefa Masegosa Gallego, a woman with dark hair and glasses, wearing a patterned top. The portrait is set within an oval frame on a blue and gold decorative card with a starburst background.

**Josefa Masegosa Gallego**

1988  
She studies the mechanisms  
of stars formation and the  
evolution of galaxies.

A black and white illustration of Josefa Masegosa Gallego, a woman with dark hair and glasses, wearing a patterned top. The portrait is set within an oval frame on a blue and gold decorative card with a starburst background.

**Josefa Masegosa Gallego**

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and evolution of galaxies.



**NANCY ROMAN**

NASA's first female chief astronomer.  
Known as the mother of Hubble for  
her role in planning the Hubble Space  
Telescope which was launched in  
1990



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**CAROLYN SHOEMAKER**

1994  
Co-discoverer of Comet Shoemaker-Levy  
9. It collided with Jupiter providing the first  
direct observation of an extraterrestrial  
collision of Solar System objects.



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**Illés Erzsébet**

2005  
Her research focuses on upper atmospheres and planetology.

This card features a portrait of an elderly woman with short white hair and glasses, resting her chin on her hand. The card has a gold and brown ornate border with a blue gem in the top-left corner.



**Illés Erzsébet**

Her research focuses on upper atmospheres and planetology.

This card is identical to the one on the left, featuring the same portrait and text, but with a blue gem in the top-right corner.



**Andreja Gomboc**

She carried out important research findings concerning Gamma Ray Bursts.

This card features a portrait of a young woman with long brown hair and blue eyes. The card has a dark blue and black ornate border with a blue gem in the top-left corner, a red gem in the bottom-left corner, and a gold gem in the bottom-right corner.



**Andreja Gomboc**

She carried out important research findings concerning Gamma Ray Bursts.

This card is identical to the one on the left, featuring the same portrait and text, but with a blue gem in the top-right corner, a gold gem in the bottom-left corner, and a red gem in the bottom-right corner.



**Ágnes Kóspál**

2009

She studies the formation of Sun-like stars and their exoplanetary systems by studying the physics and evolution of circumstellar disks.



**Ágnes Kóspál**

She studies the formation of Sun-like stars and their exoplanetary systems by studying the physics and evolution of circumstellar disks.



**JOSEFA BECERRA GONZÁLEZ**

2011

Her thesis was the study of very high energy gamma ray sources: discovery of the blazars PKS 1222+21 and 1ES 1215+303.



**JOSEFA BECERRA GONZÁLEZ**

Her thesis was the study of very high energy gamma ray sources: discovery of the blazars PKS 1222+21 and 1ES 1215+303



**Balázs Júlia**

1959  
She has a recognition for  
her studies called  
Balázs Júlia's theory.



**Balázs Júlia**

She has a recognition for  
her studies called  
Balázs Júlia's theory.



**Vera Rubin**

1992  
She discovered a galaxy  
(NGC 4550) in which half the stars in the  
disk are orbiting in one direction and half  
in the opposite direction, with both  
systems intermingled.



**Vera Rubin**

She discovered a galaxy  
(NGC 4550) in which half the stars in the  
disk are orbiting in one direction and half  
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