



BE THE INSPIRATION

Rotary
Club of San Francisco



Welcome to our Club Meeting!
September 4, 2018



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Please, no annoying phone sounds during the meeting.

**Thank you for the \$100
donation to Rotary
Charities!**



WELCOME, VISITING
ROTARIANS AND GUESTS!





**Many thanks to today's Club
Service volunteers!**



The Agenda

Calendar

Around Town

Member Moment – Sally Swanson

Our Foundation and The Rotary Foundation

Check Presentations

Twenty for Twenty

Table Talk

Speaker – Len Kui

Door Prize – The Academy of Sciences

Adjourn



Rotary
Club of San Francisco



E&ABOUT

District 5150
Picnic, Sunday,
August 19



3&ABOUT





Just for fun! Since we're
on the topic of SPACE!





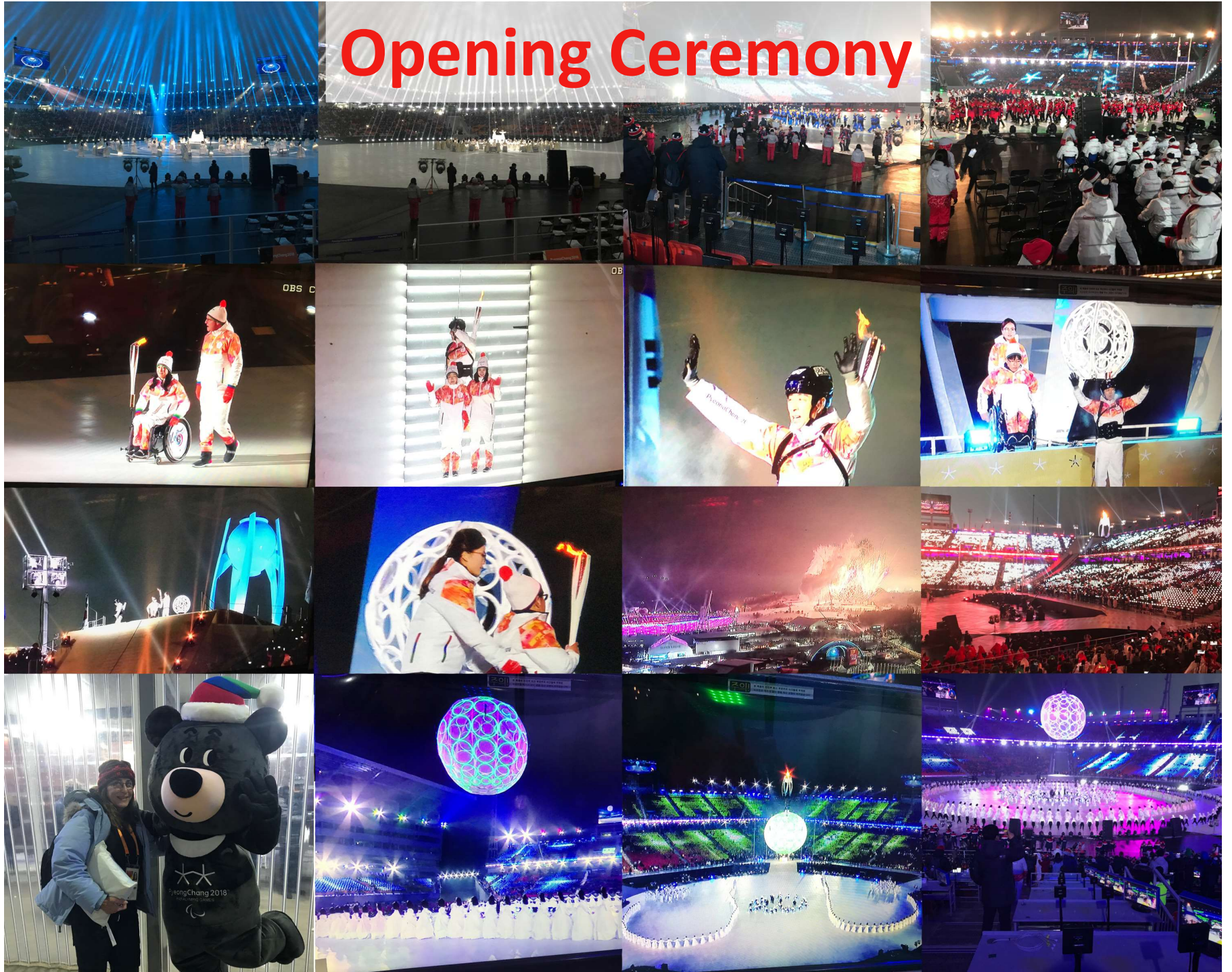
Member Spotlight: Sally Swanson





**Welcome to the 2018
PyeongChang Paralympics**

Opening Ceremony





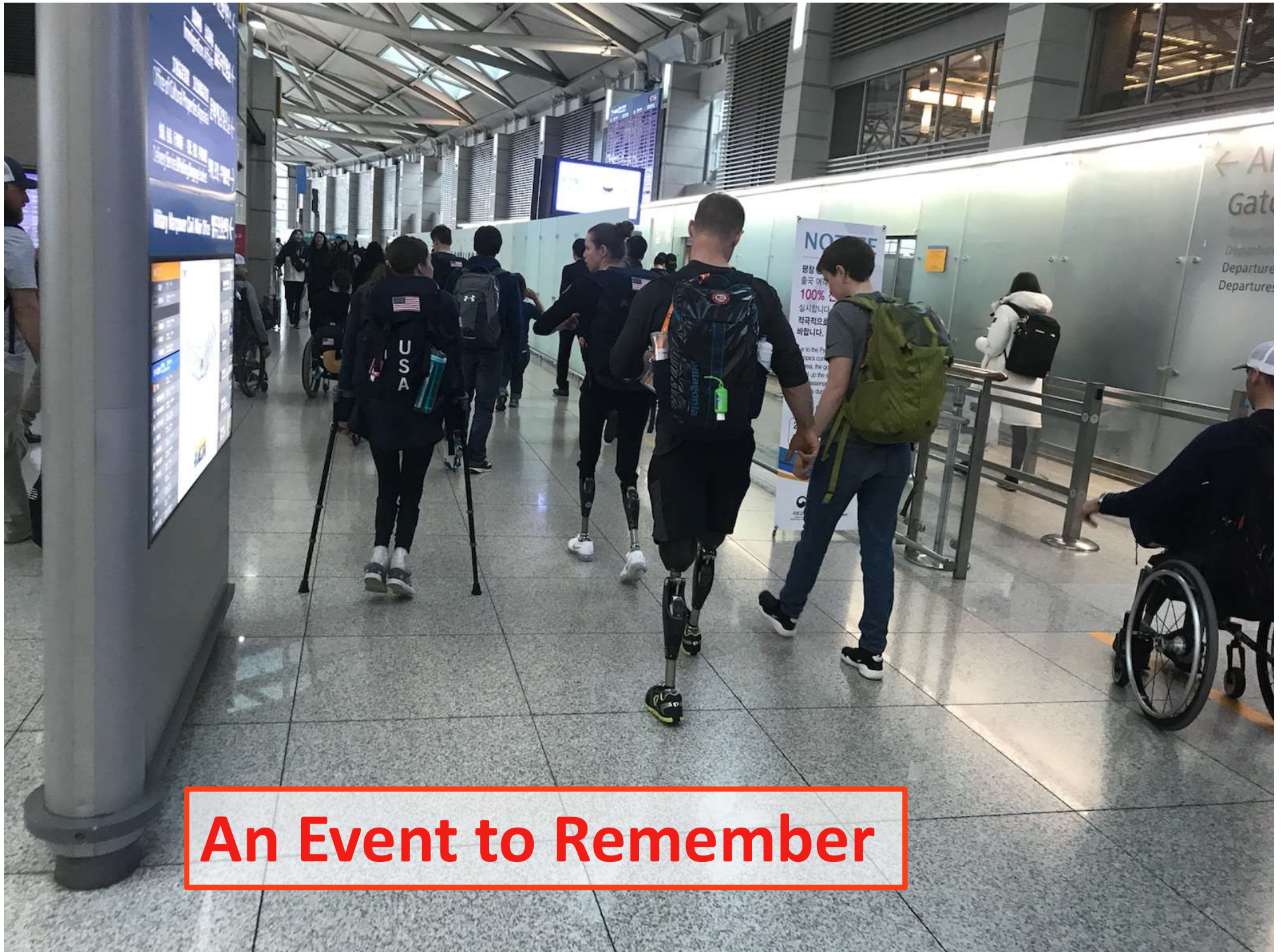


PyeongChang Medals Plaza



Closing Ceremony





An Event to Remember



A Generous Contributor to Local and Global Communities





**The San Francisco
Rotary Foundation**

**2018-2019
distribution on
investments =
\$140,000**



**The Rotary
Foundation – Rotary
International**

**Our 2018-2019
giving goal = \$40,000**



**The San Francisco
Rotary Foundation**



**The Rotary Foundation –
Rotary International**

\$40,000 goal

**Super Bowl Pool - Jan
Paul Harris Fellow(s) –
all year**

Raffle Tickets – by 10/15



**The San Francisco
Rotary Foundation**



**The Rotary Foundation –
Rotary International**

\$140,000 in gifts

**This week!
Four Interact
scholarships at
\$2,000 each**



**The San Francisco
Rotary Foundation**

\$140,000 in gifts

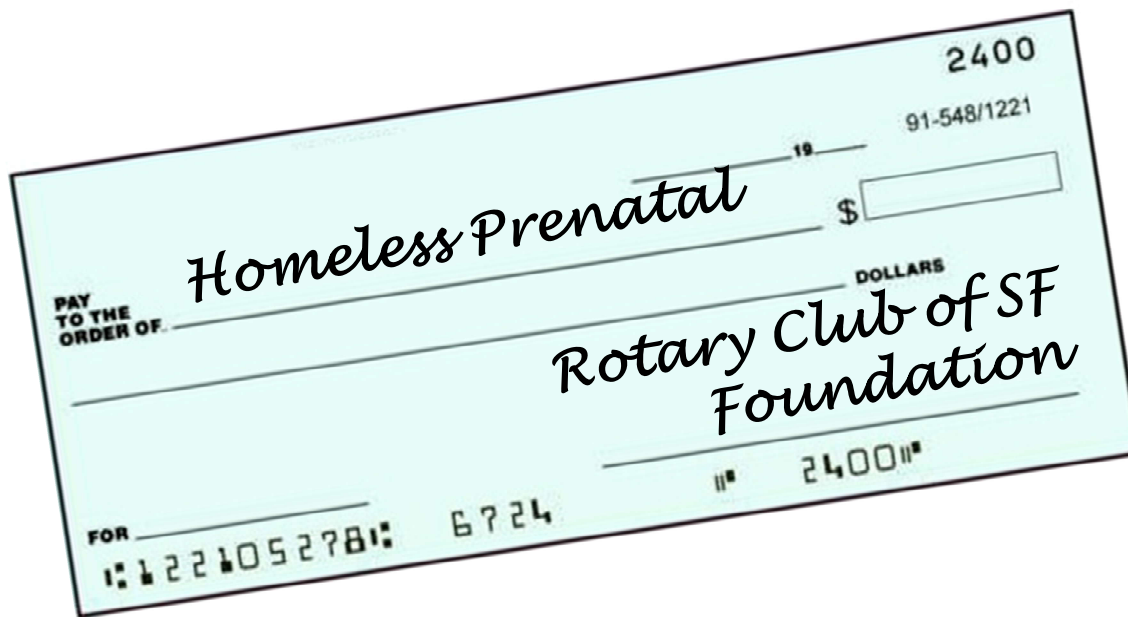
This week!

Arc - \$10,000

**Homeless Prenatal –
\$10,000**



**The Rotary Foundation –
Rotary International**

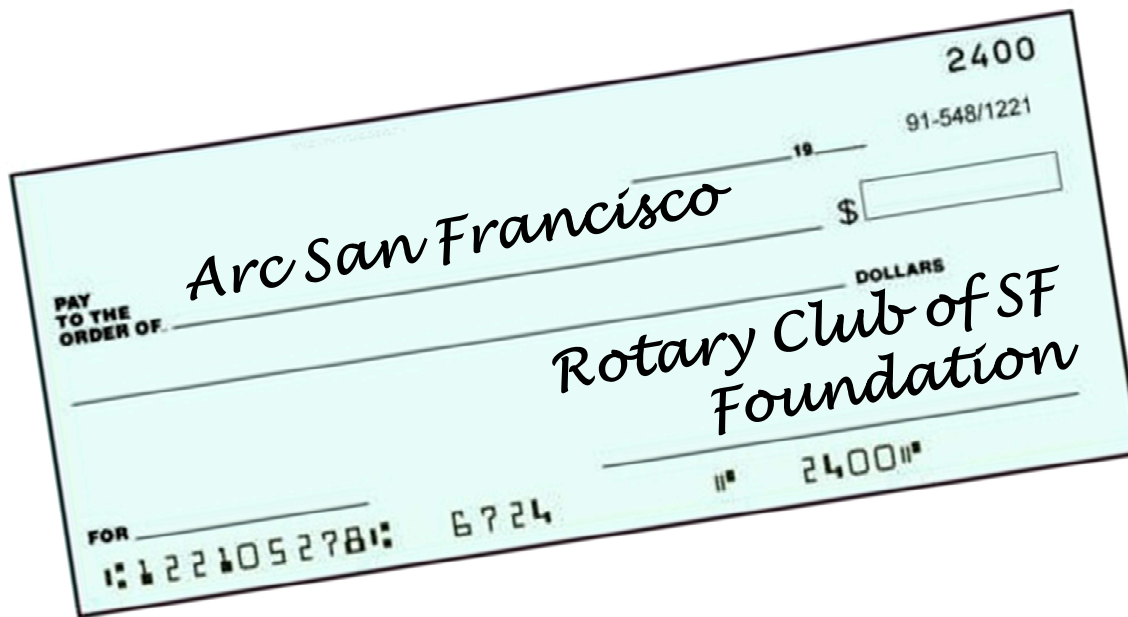


Vision: Supporting Healthy Communities



Homeless Prenatal Program

Bag Assembly, Tues, 9.11.18, 6:00 pm
Showers, Thurs, 9.13.18,
10:30 am/1:00 pm
Go to www.sfrotary.com



Vision: Supporting Healthy Communities



Arc San Francisco Friends Like Me Dinner Club

Monday, 9.17.18, 6:00 pm
Go to www.sfrotary.com







Table Talk:
“The best star gazing I ever did was...”

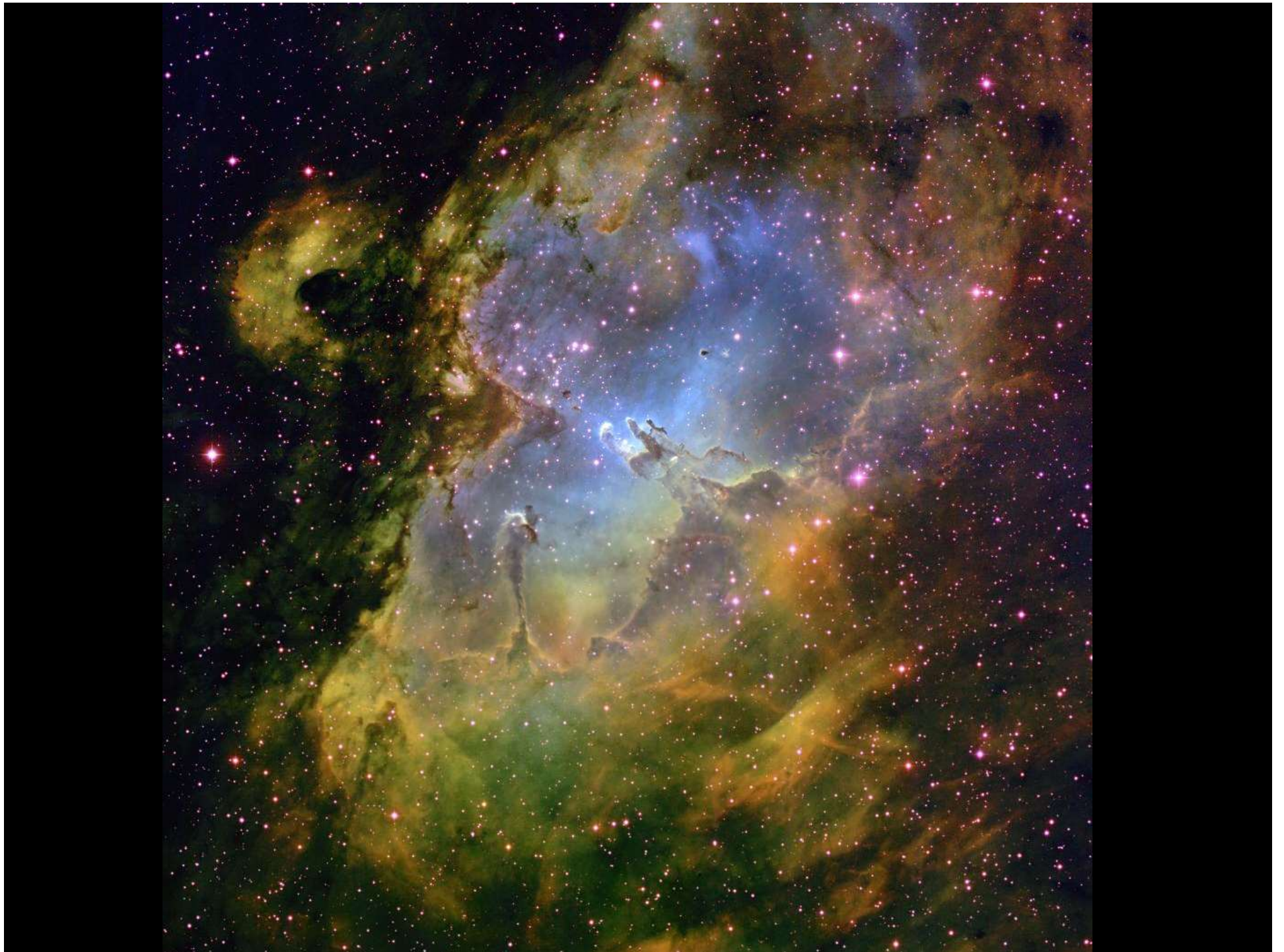


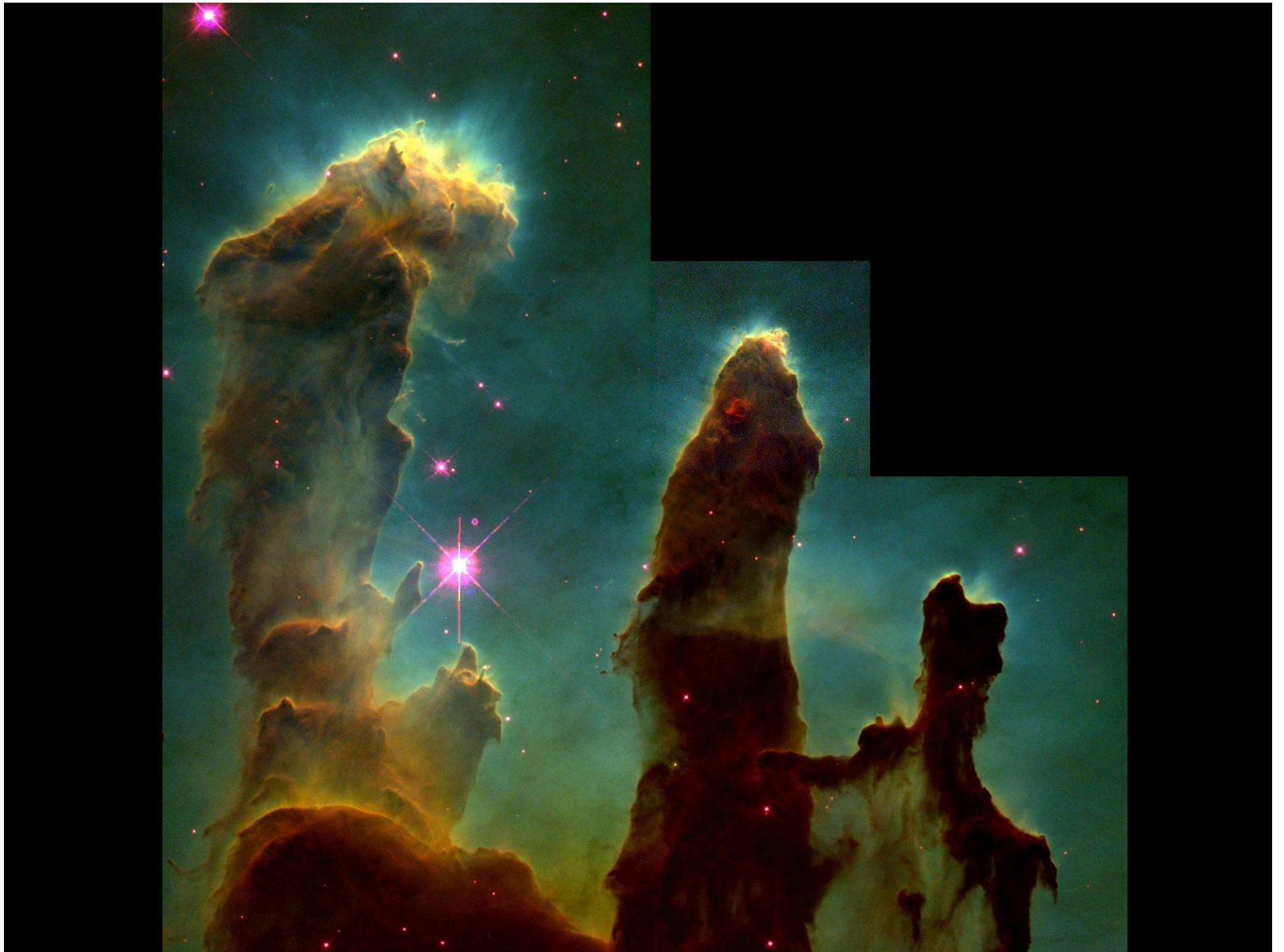
A Star is Born...and Dies

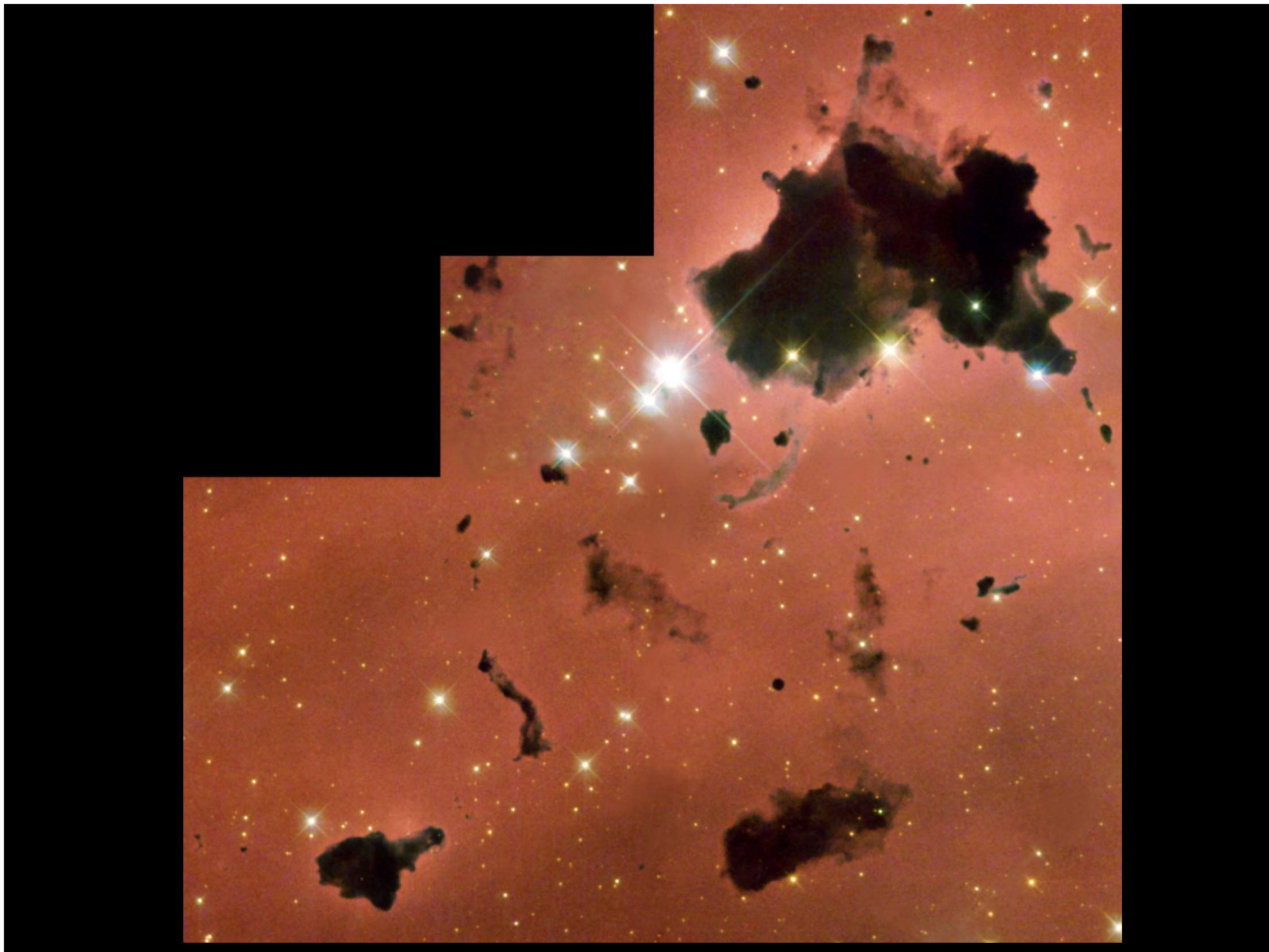
The Life and Death of Stars

Life Stages of a Star like the Sun

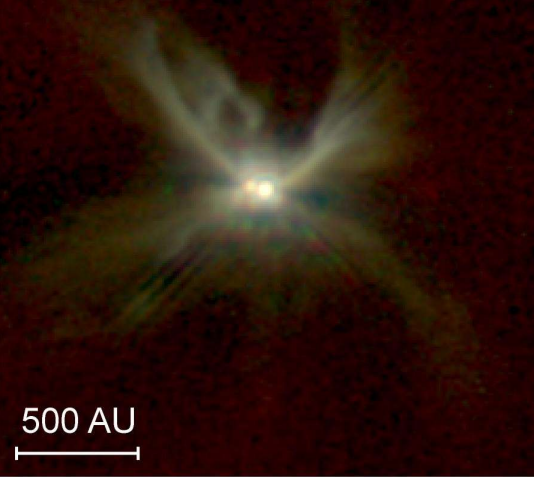
- Pre-Main Sequence: formation, gravity is energy source, 100 million years
- Main Sequence: nuclear reactions convert hydrogen into helium plus energy, 10 billion years
- Red Giant: expansion of outer layers, ejection of shells, few 100 million years
- Planetary Nebulae, few 100 million years
- White Dwarf, few 10 billion years



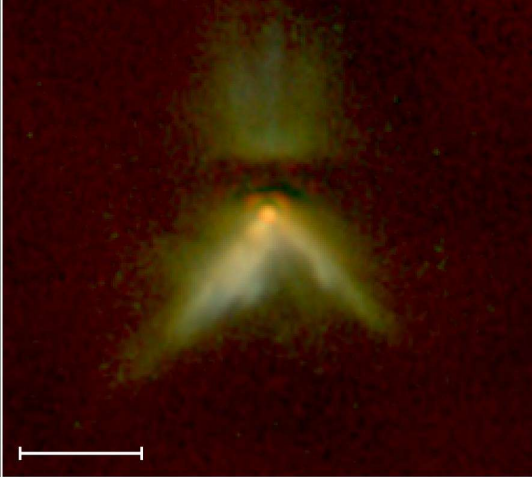




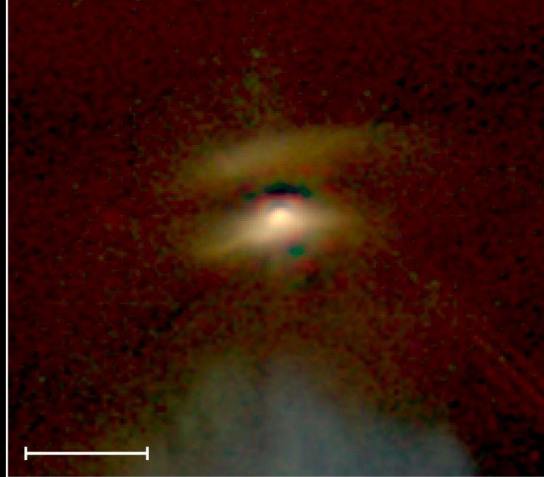
CoKu Tau1



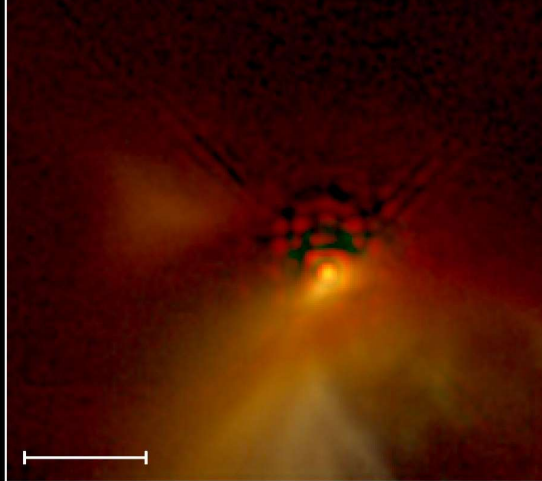
DG Tau B



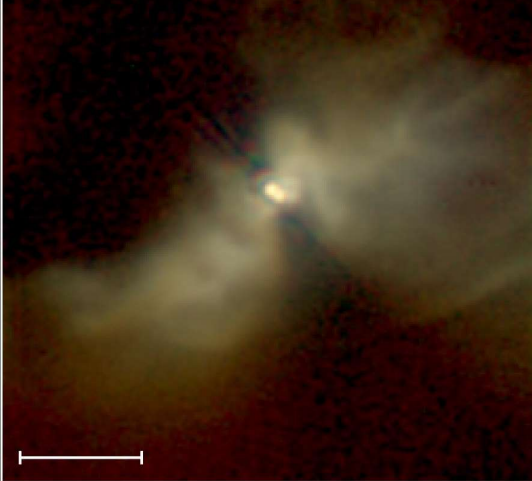
Haro 6-5B



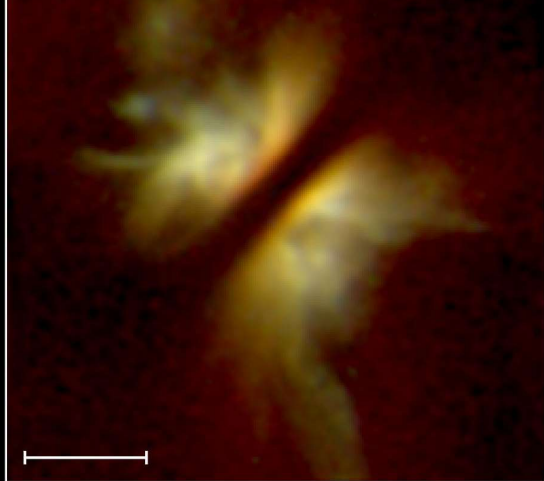
IRAS 04016+2610



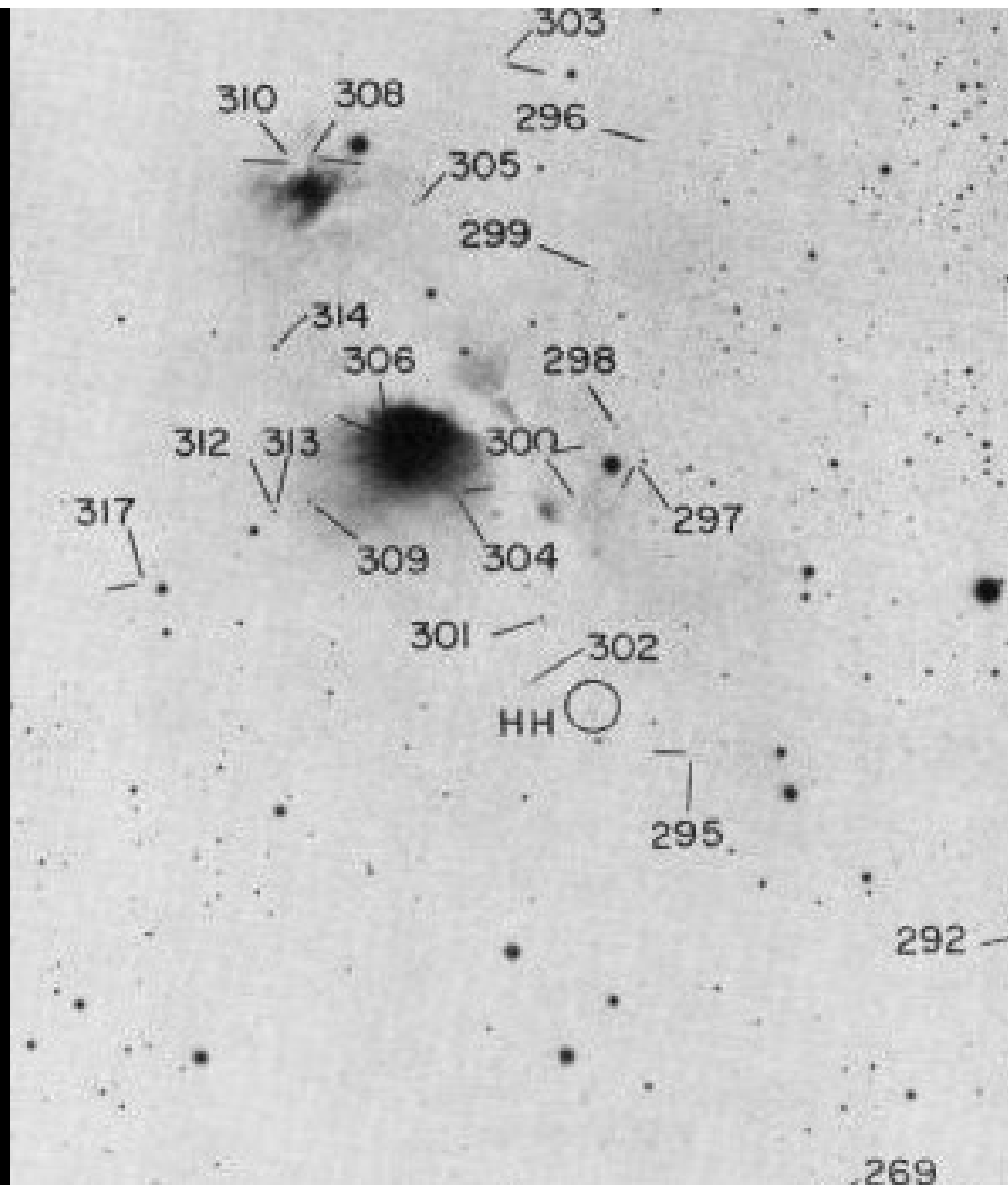
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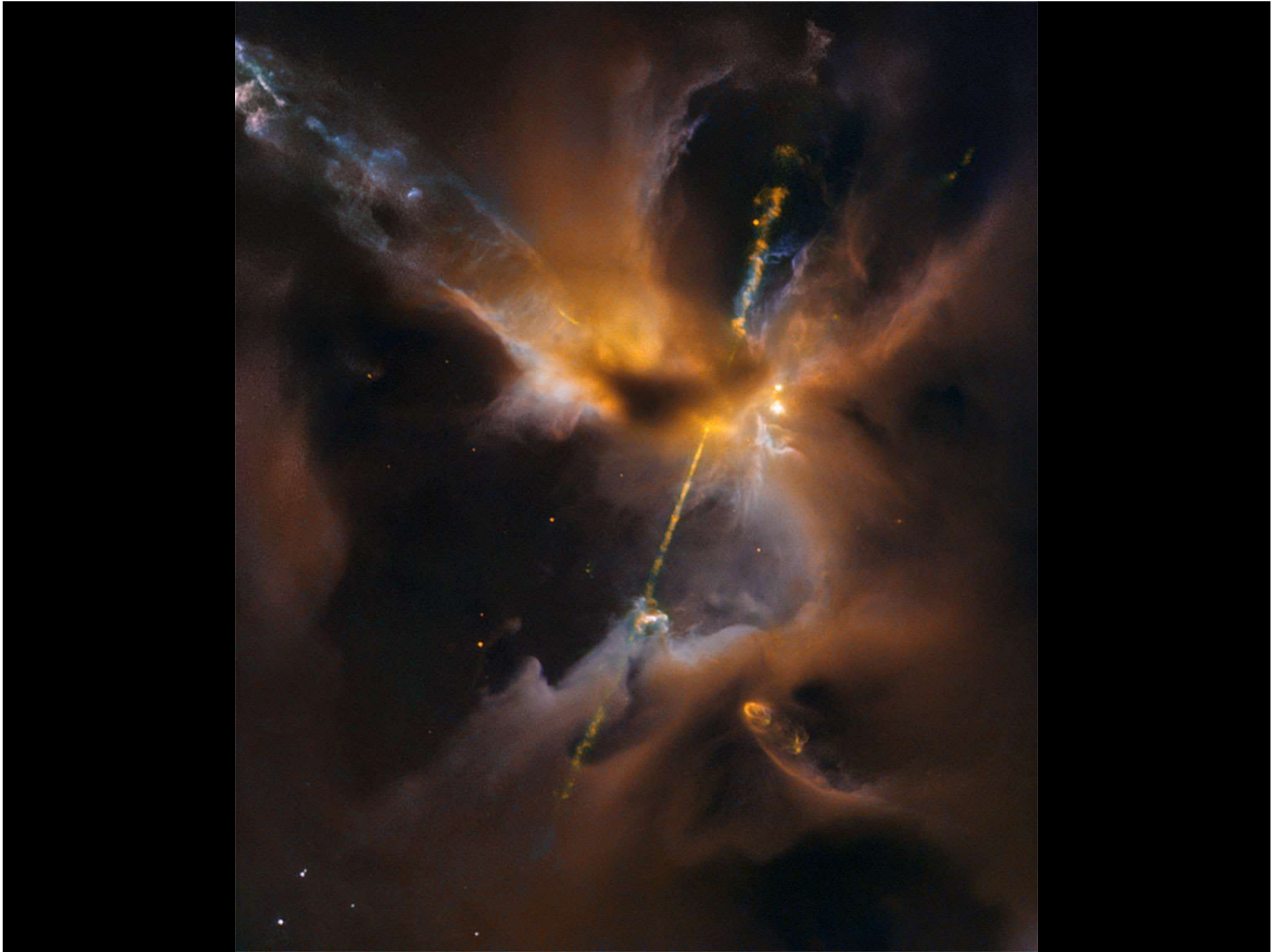


IRAS 04302+2247



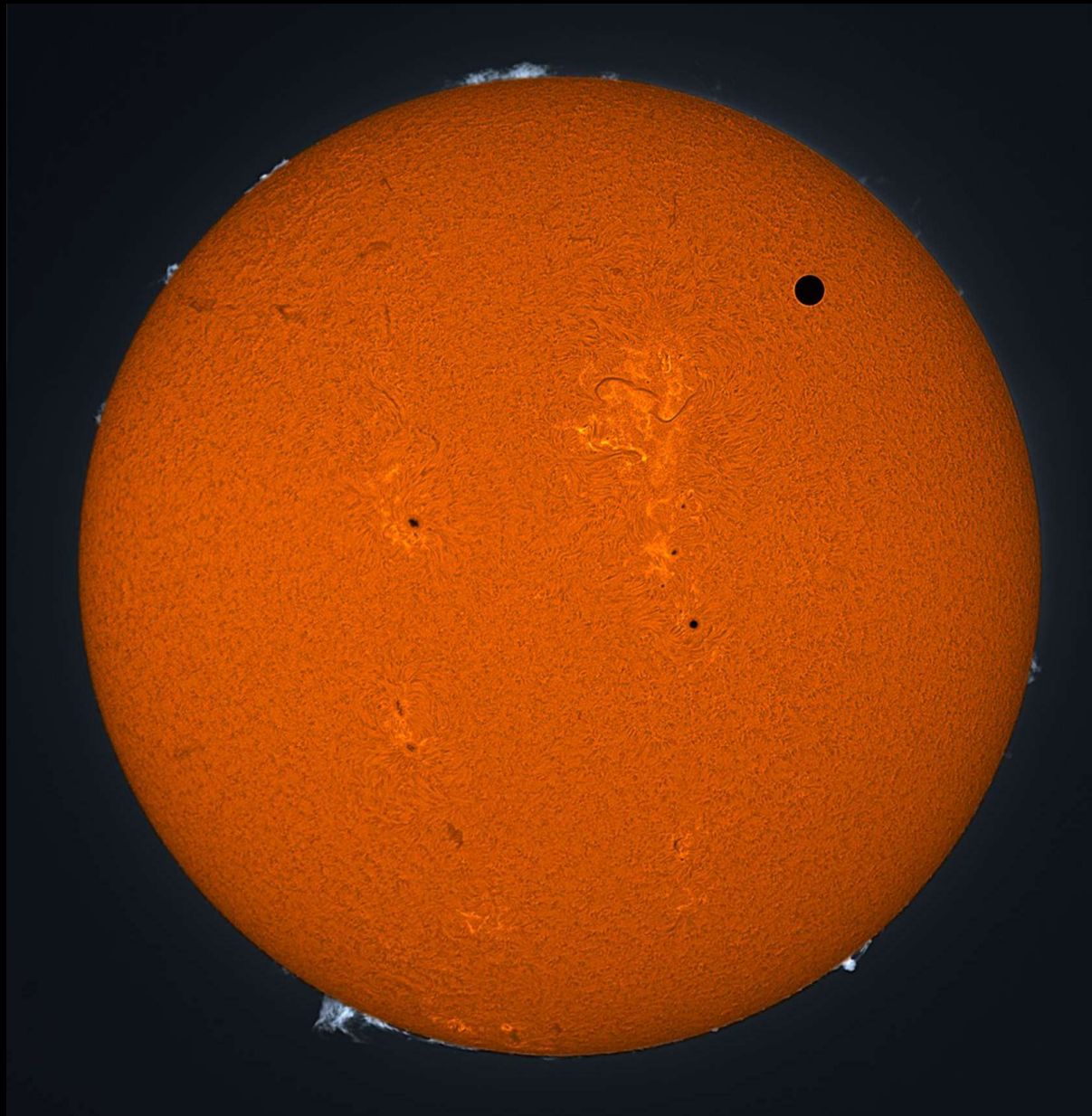
Young Stellar Disks in Infrared Hubble Space Telescope • NICMOS

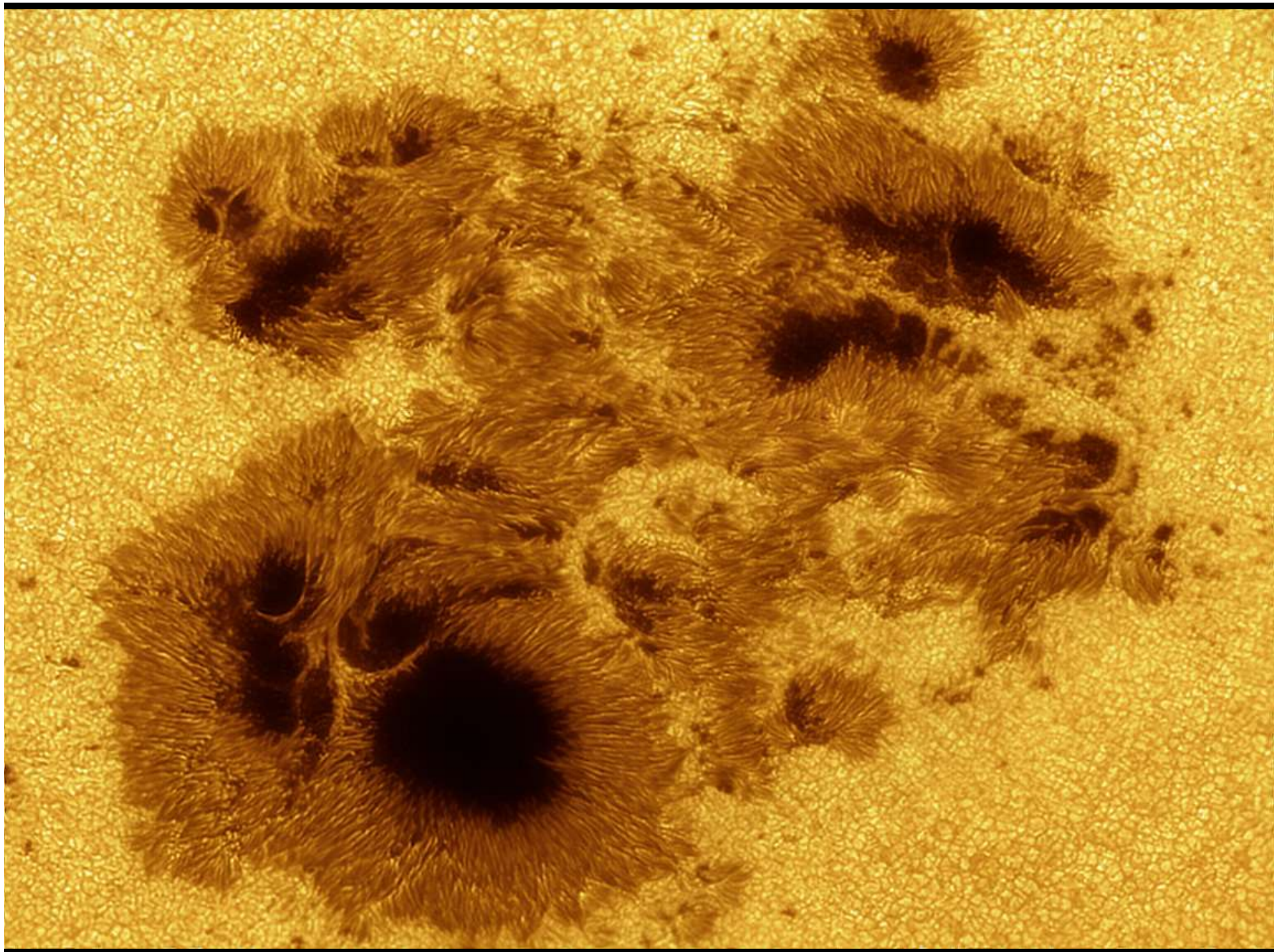


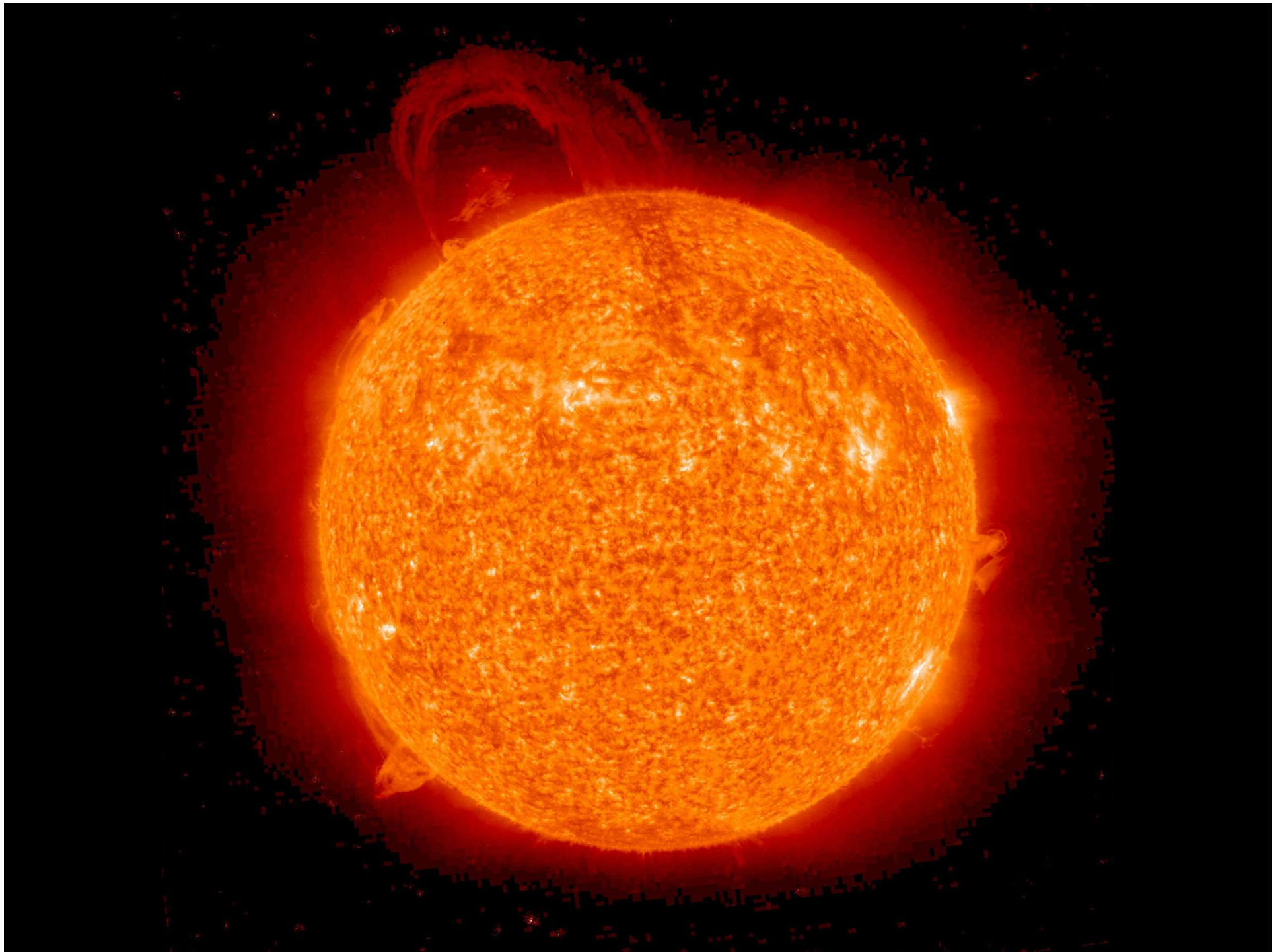


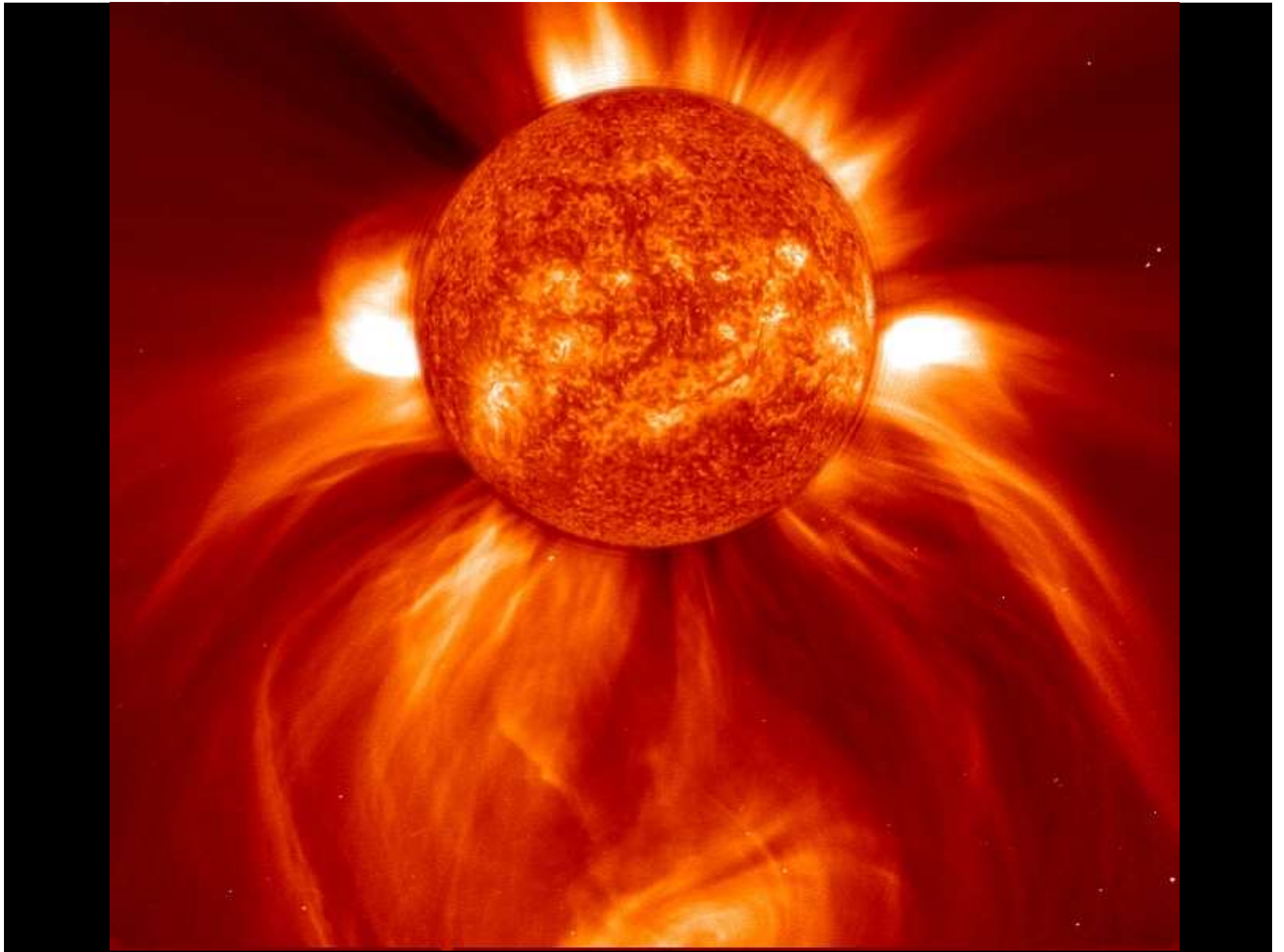
Life Stages of a Star like the Sun

- Pre-Main Sequence: formation, gravity is energy source, 100 million years
- Main Sequence: nuclear reactions convert hydrogen into helium plus energy, 10 billion years
- Red Giant: expansion of outer layers, ejection of shells, few 100 million years
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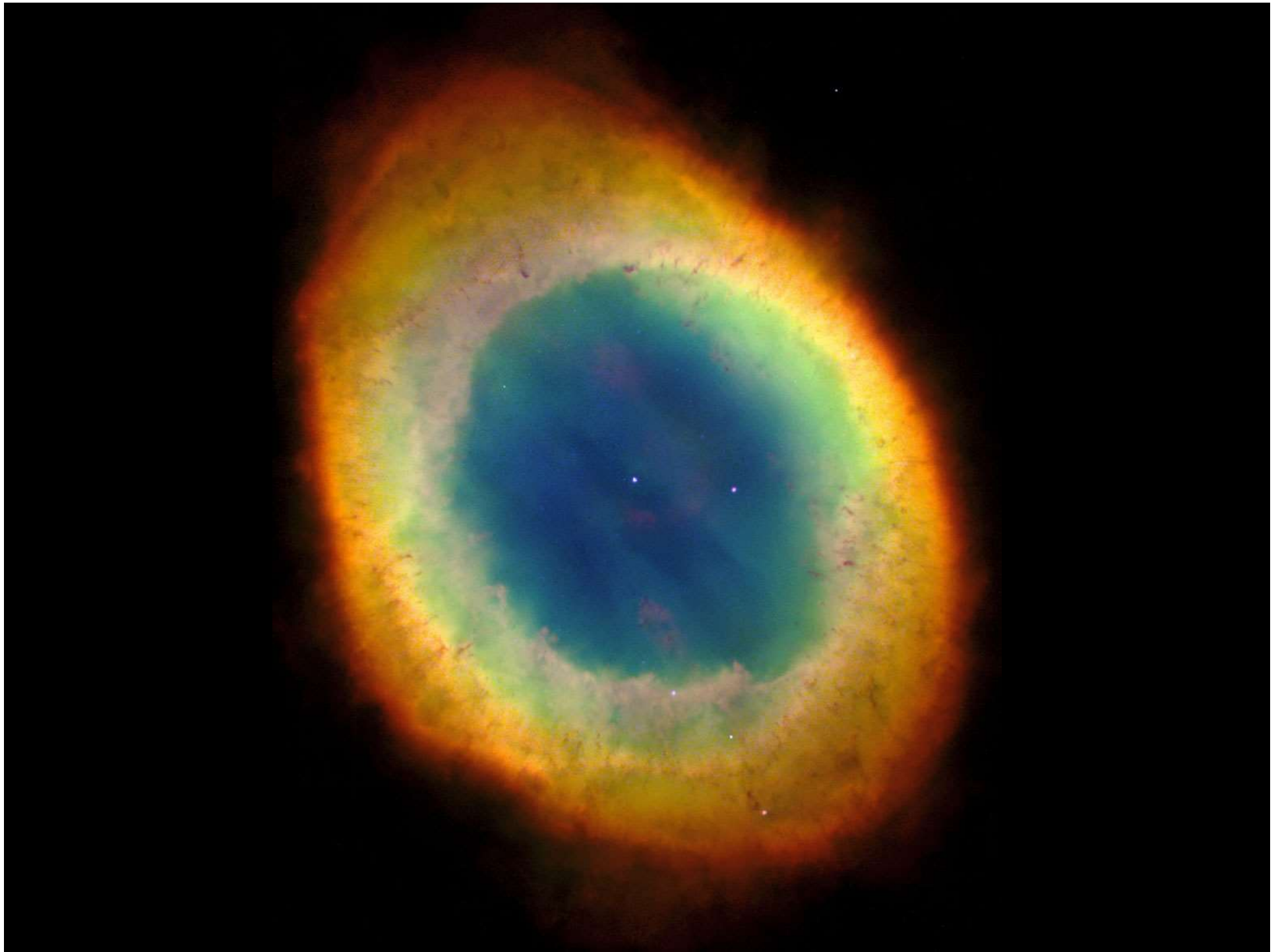
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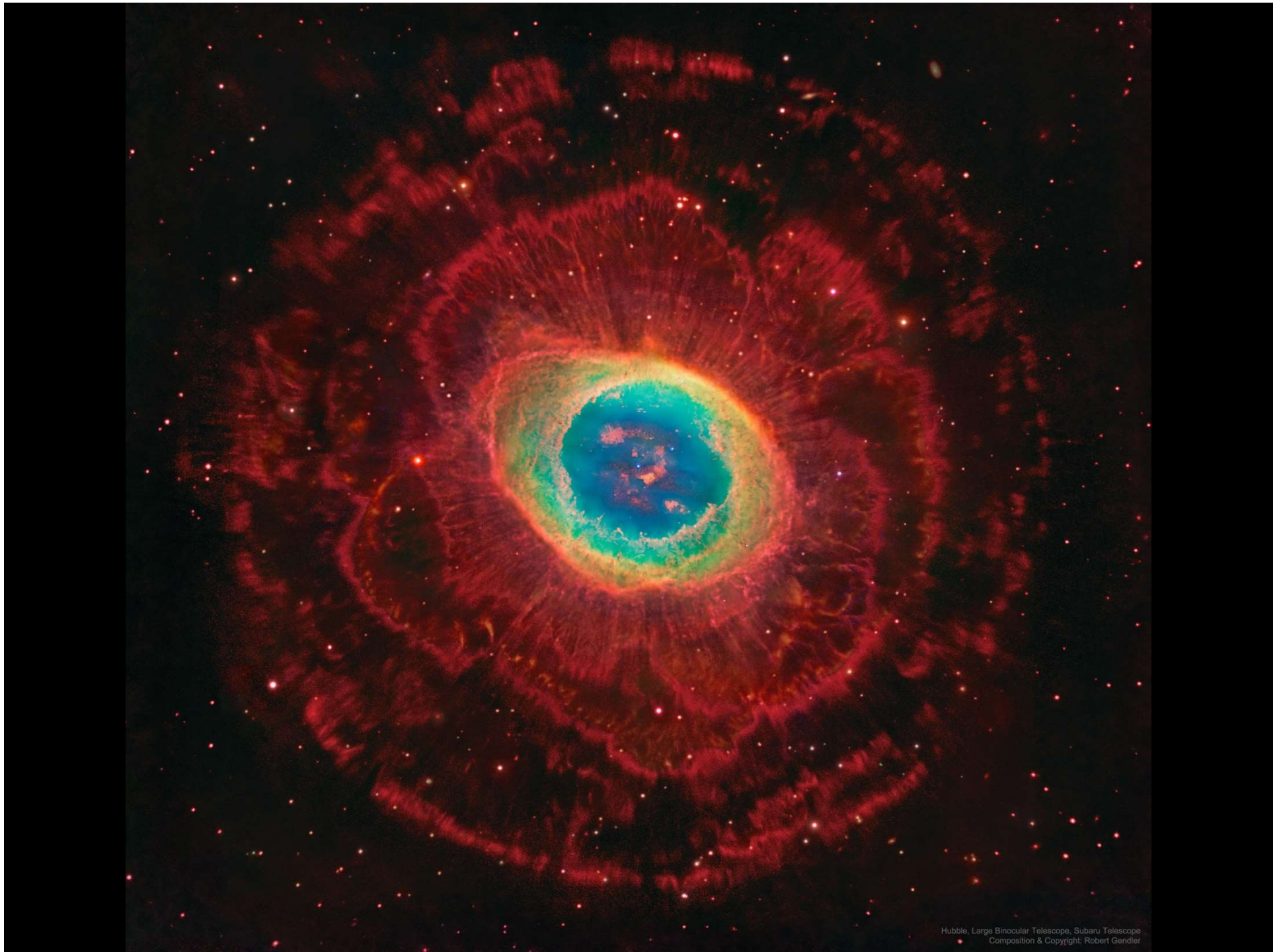
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Hubble, Large Binocular Telescope, Subaru Telescope
Composition & Copyright: Robert Gendler

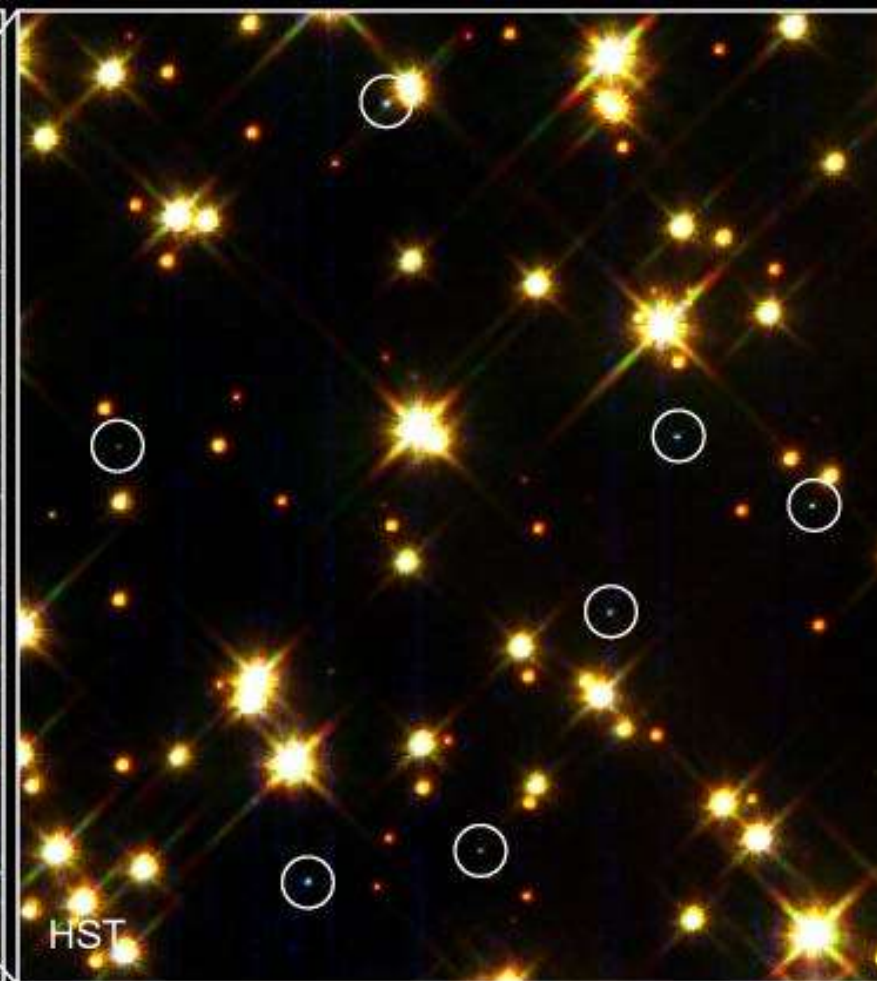
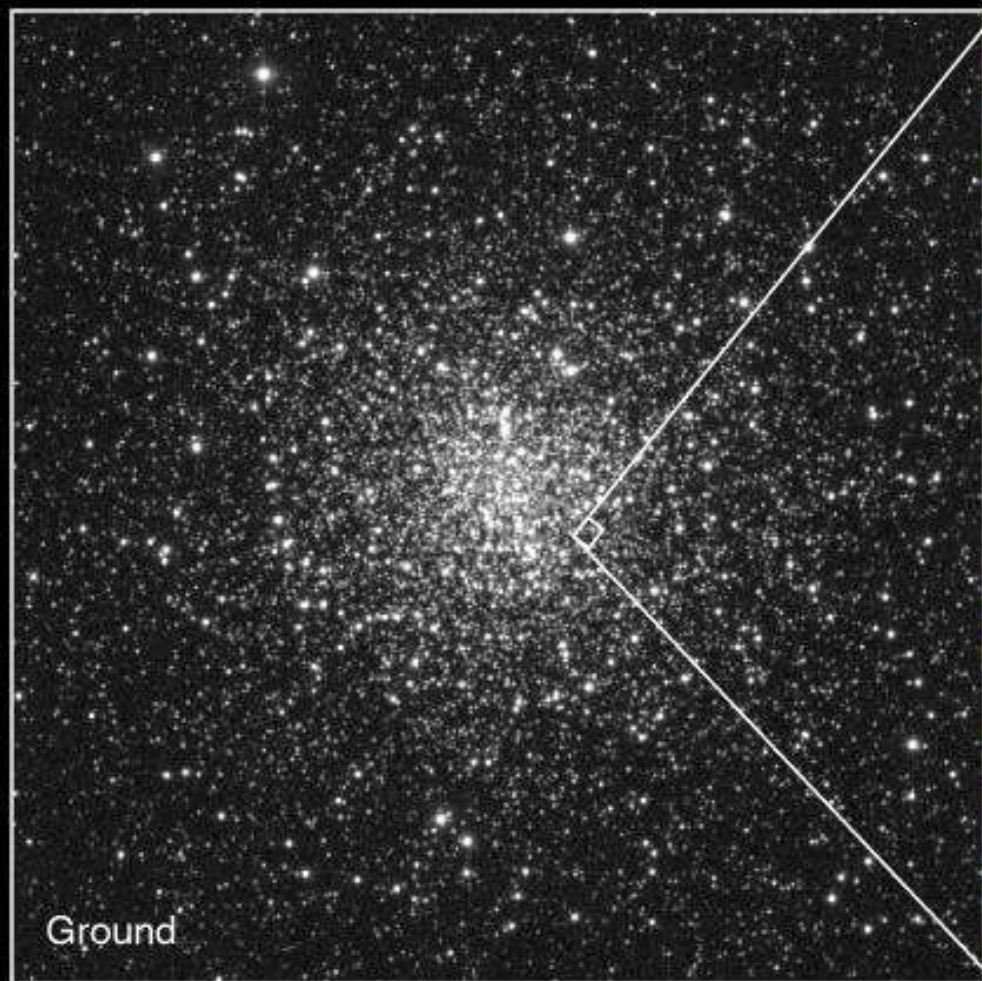




Hubble
Heritage

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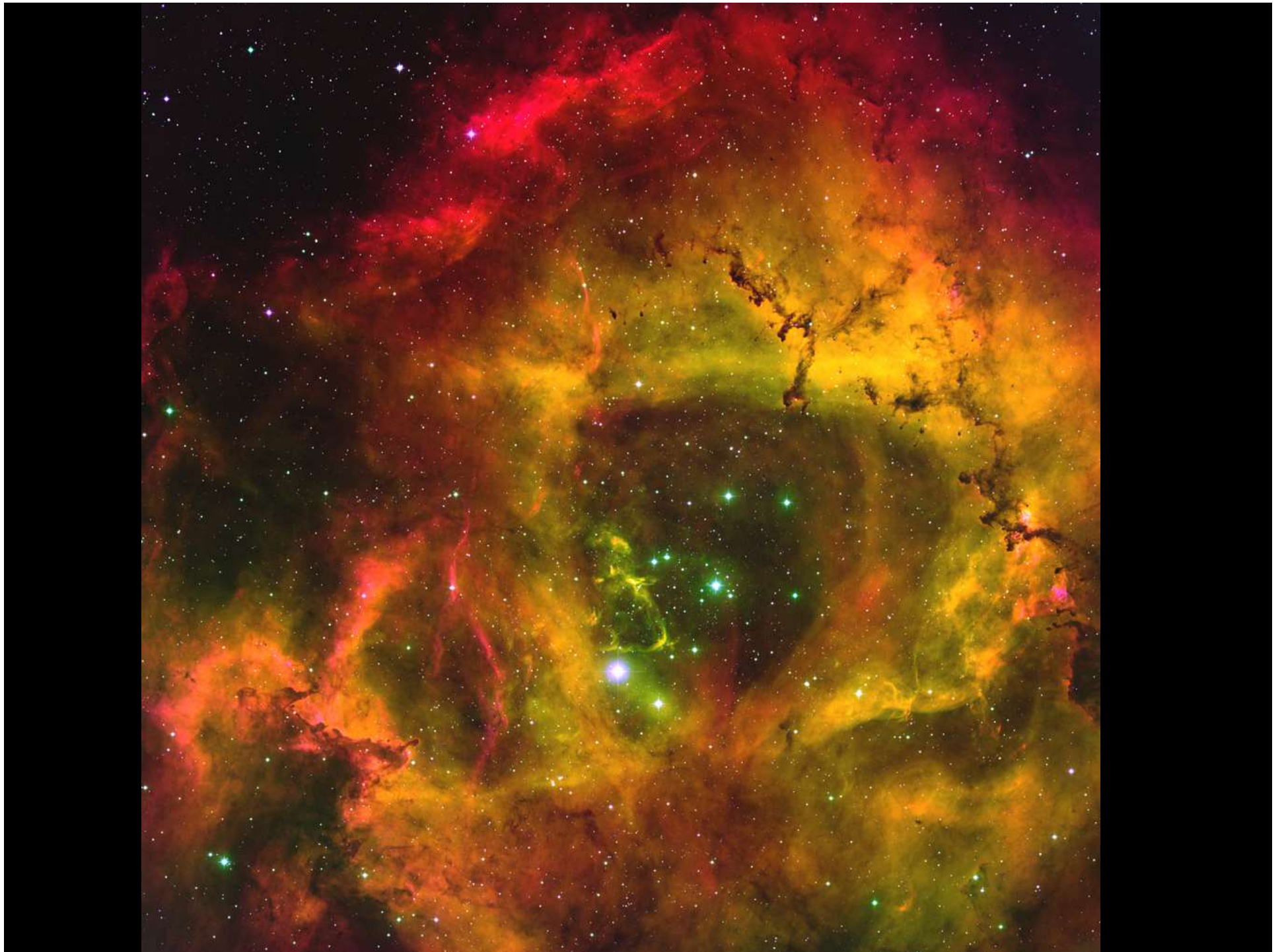
White Dwarf Stars in M4

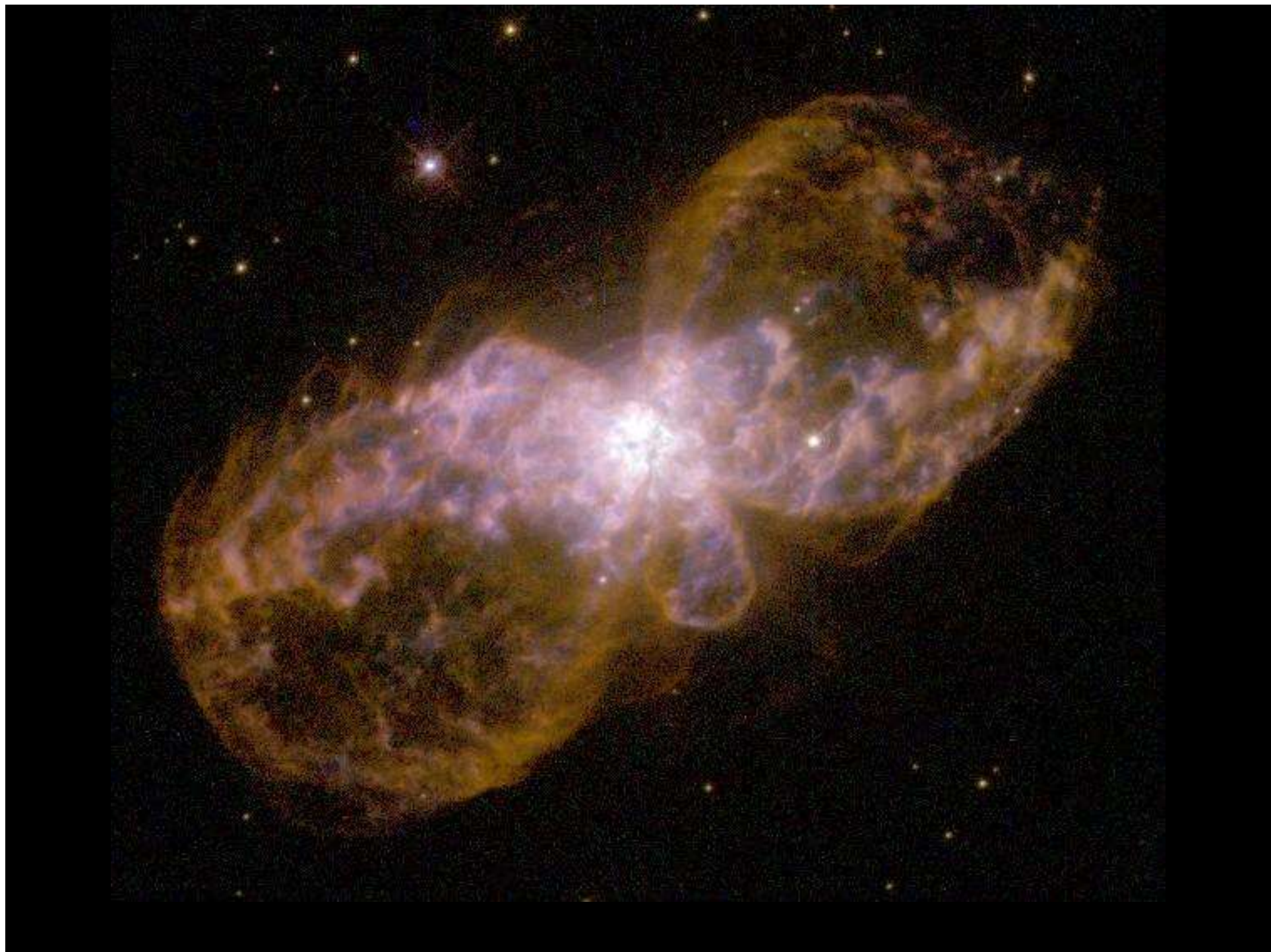
PRC95-32 · ST ScI OPO · August 28, 1995 · H. Bond (ST ScI), NASA

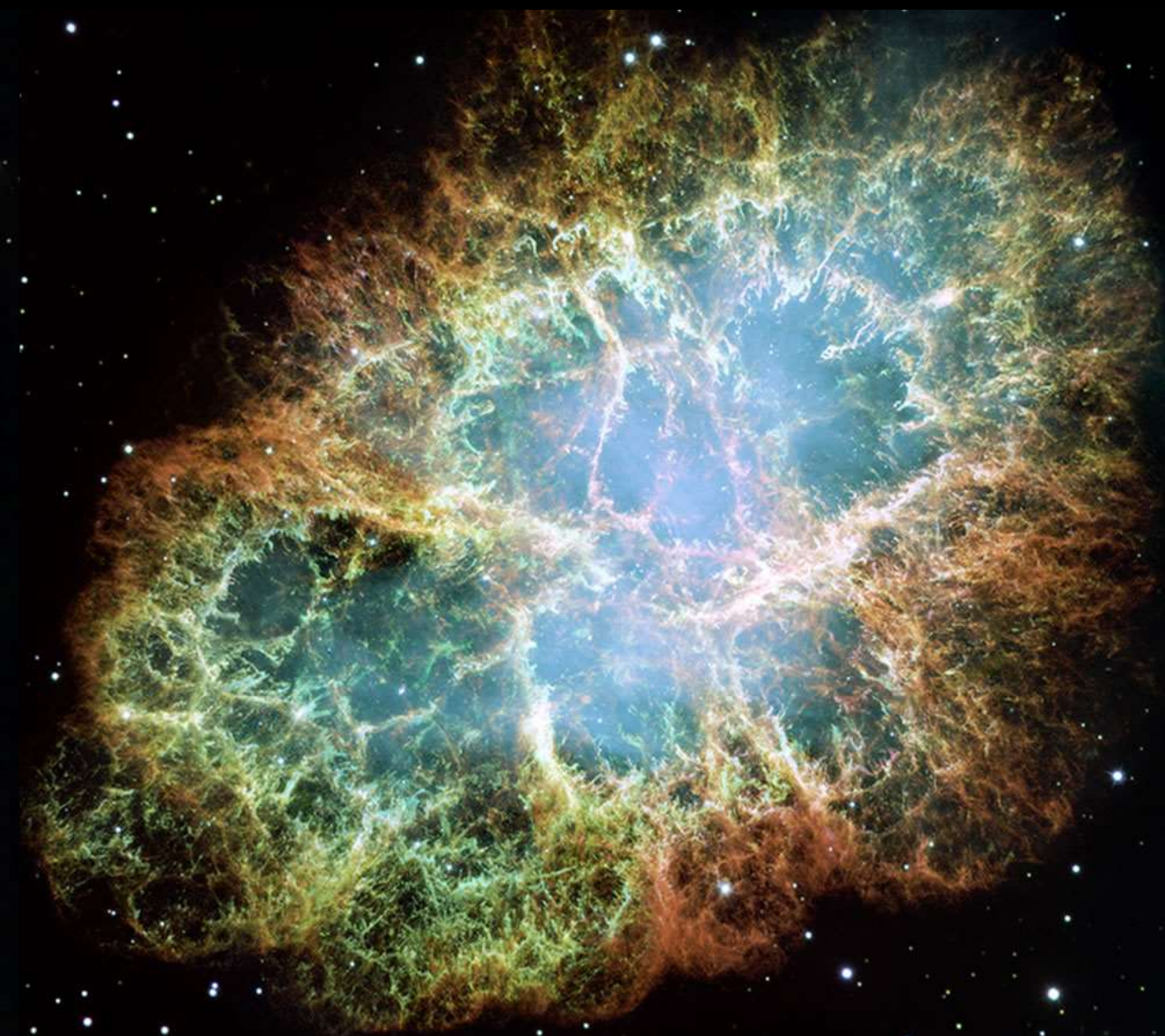
HST · WFPC2

Life Stages of a Star 10X Sun's Mass

- Pre-Main Sequence: formation, gravity is energy source, few million years
- Main Sequence: nuclear reactions convert hydrogen into helium plus energy, few 10 million years
- Red Supergiant: Expansion of outer layers, more nuclear reactions, build up heavier elements, few 100,000 years
- Collapse of core: supernova!! Few seconds
- Neutron star (black hole for a star 20X sun's mass): 10 - 100 billion years







Mosaic of The Crab Nebula

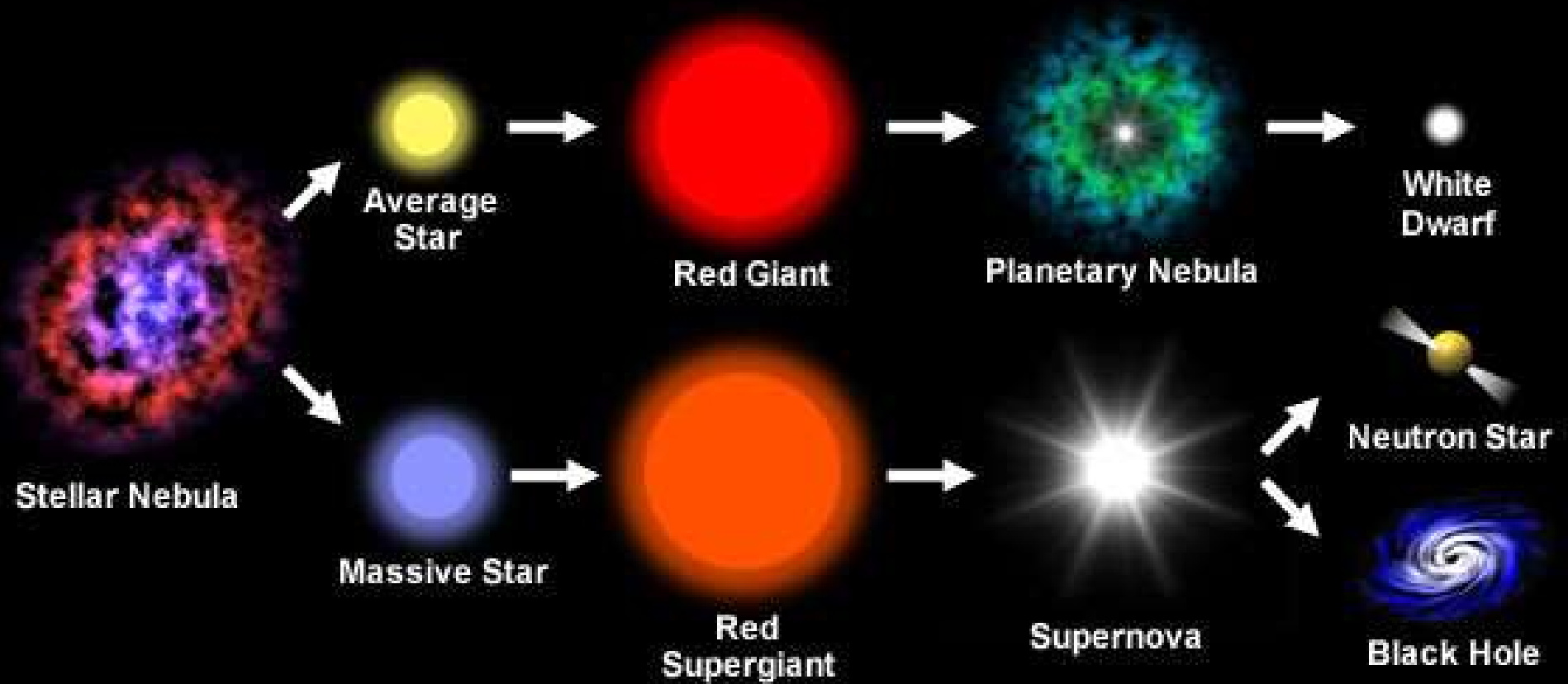


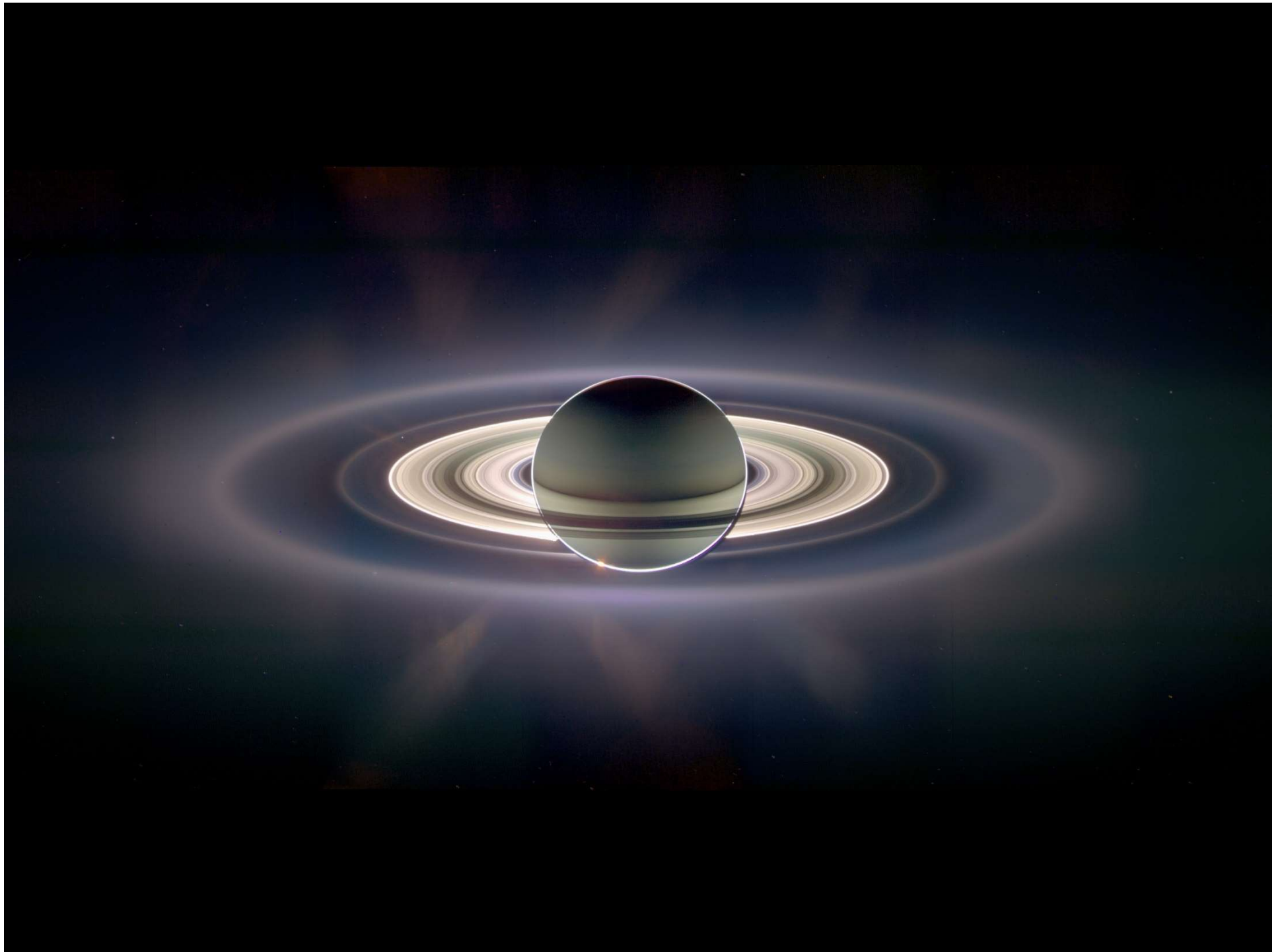
HUBBLESITE.org





Life Cycle of a Star





Earth



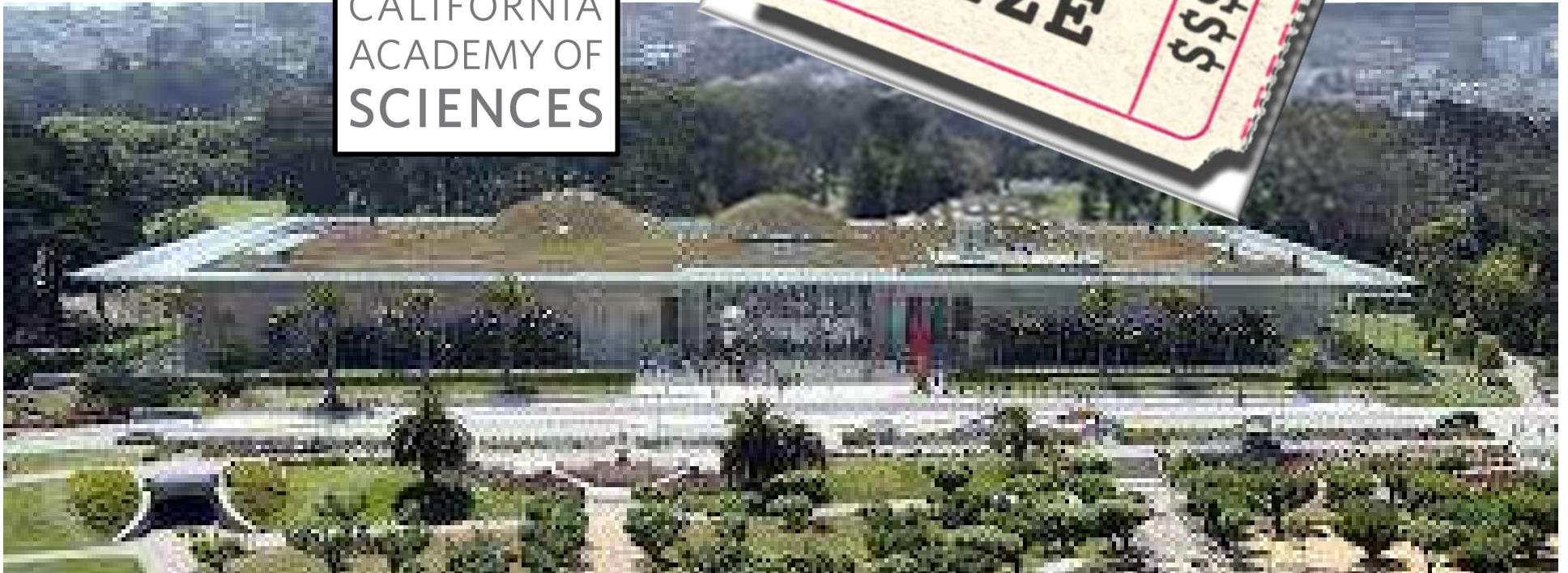




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CALIFORNIA
ACADEMY OF
SCIENCES





DON'T MISS THE MEETING!

September 11

SF Atty John O'Connor

**Today's Parallels
With Watergate**





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