

The Observatory Pinafore

messo in scena dal personale dell'osservatorio di Harvard il 31 Dicembre 1929



Cecilia Payne

Di che cosa sono fatte le stelle

Cambridge, Trinity College Dining Hall
2 dicembre, 1919

The New York Times
**LIGHTS ALL ASKEW
IN THE HEAVENS**

Men of Science More or Less
Agog Over Results of Eclipse
Observations.

EINSTEIN THEORY TRIUMPHS

Stars Not Where They Seemed
or Were Calculated to be,
but Nobody Need Worry.

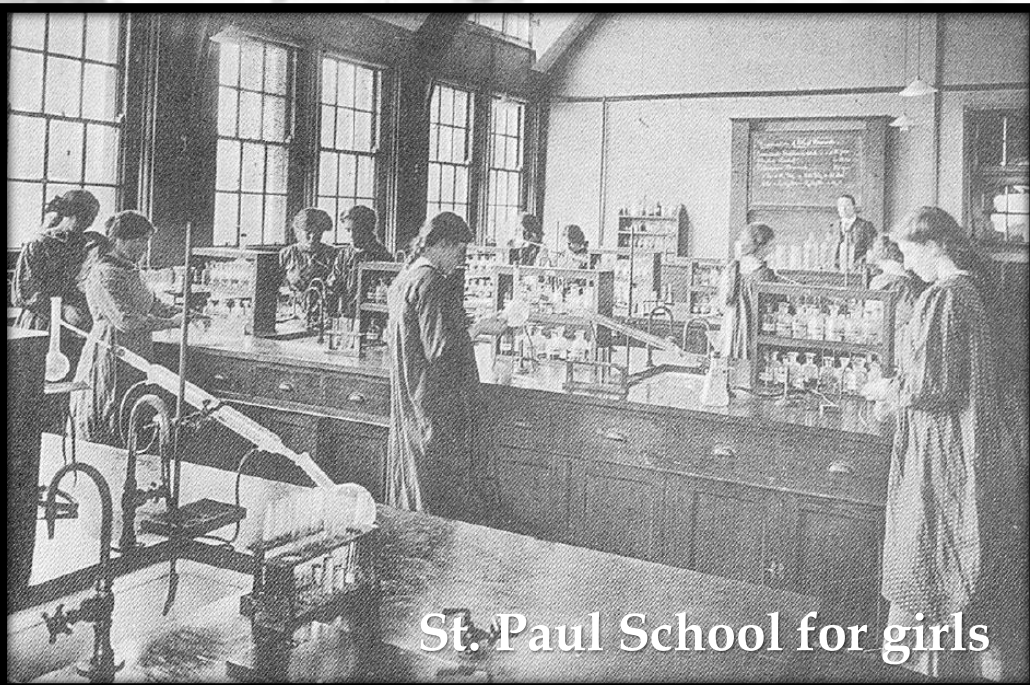
*...my world has been so shaken that I experienced
something like a nervous breakdown*

Wendover, Buckinghamshire (1900-1912)

My roots were deep in the Buckinghamshire soil, and at first I thought that the uprooting would kill me. Indeed, when I return to my native village, it seems to me the loveliest in the world



Londra (1912-1919) *a brooding shadow on the horizon*

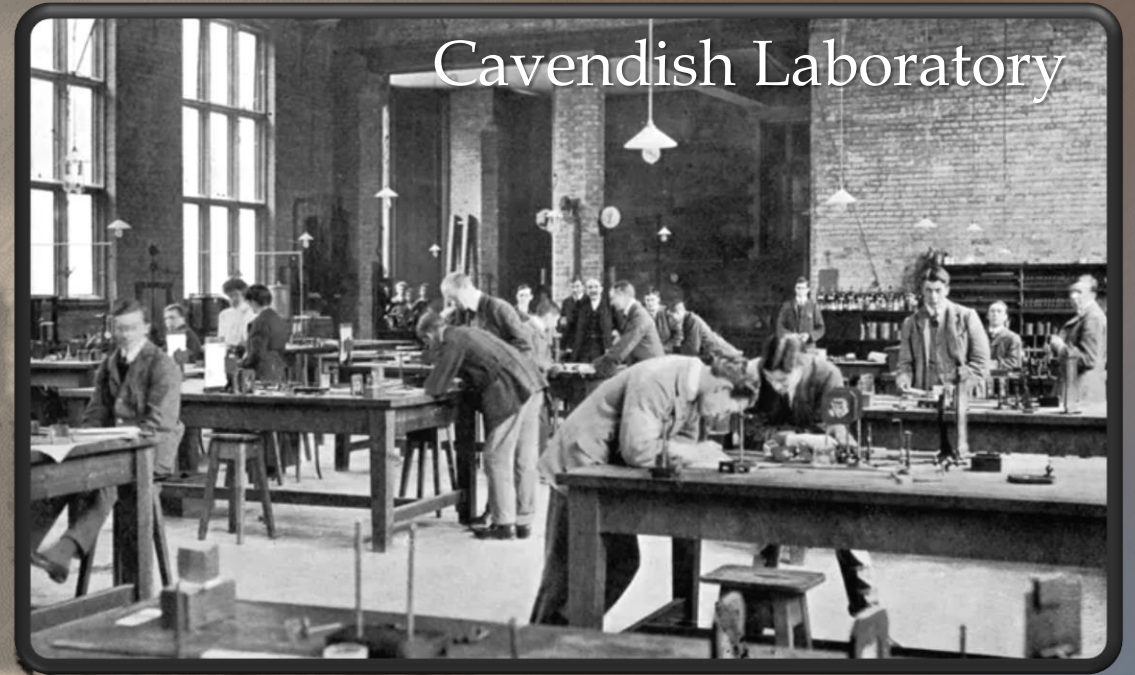


St. Paul School for girls

I shall never lonely again. Now I can think about science.

He [Eddington] had opened the doors of the heavens to me

Telescopio equatoriale Sheepshanks



Cavendish Laboratory

I was the only woman student who attended.

Cambridge e il Newnham (1919-1923)

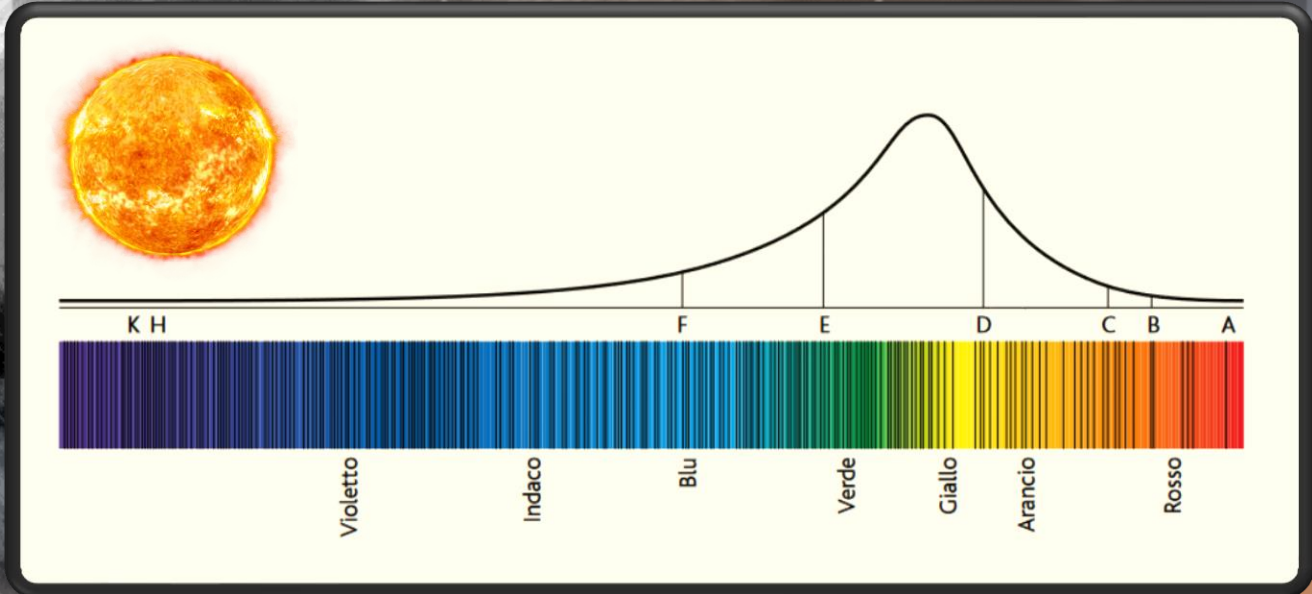
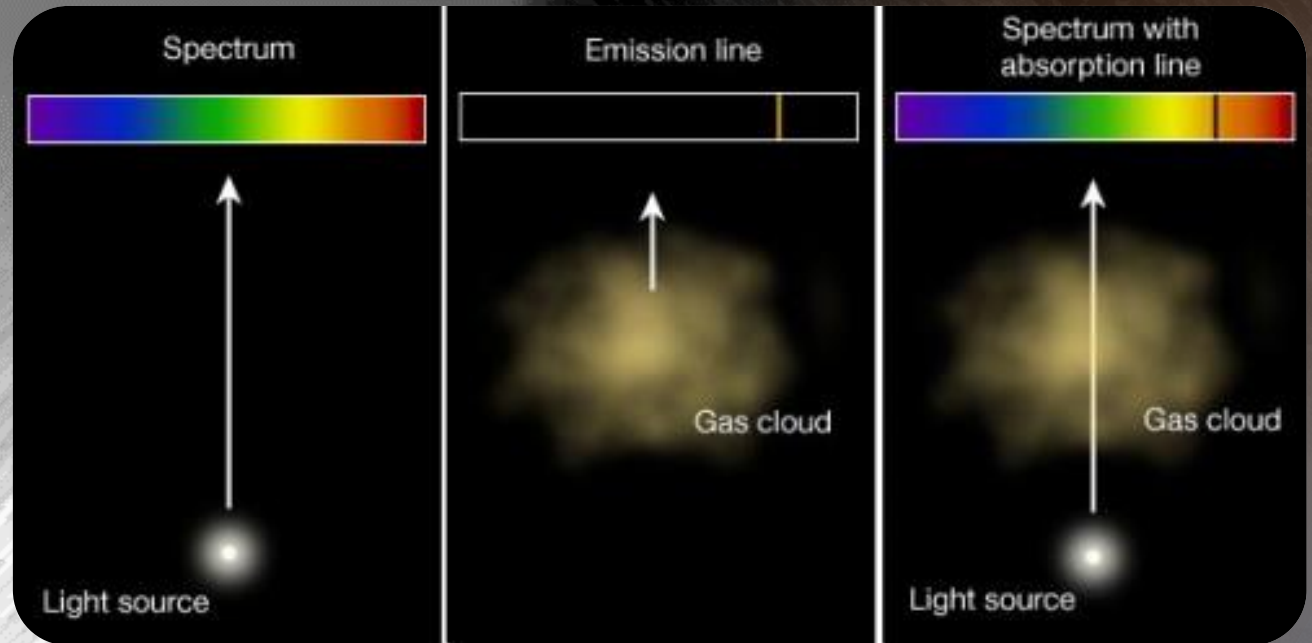


Da Cambridge a Harvard (1923-1929)

Spettri Stellari

*Oh, Be A Fine Girl
(Guy), Kiss Me*

Riga	Lunghezza d'onda (nm)	Origine
A	759,4	Ossigeno terrestre
B	686,7	Ossigeno terrestre
C	656,3	Idrogeno (H-alfa)
D1	589,6	Sodio neutro (Na I)
D2	589,0	Sodio neutro (Na I)
E	527,0	Ferro neutro (Fe I)
F	486,1	Idrogeno (H-beta)
H	396,8	Calcio ionizzato (Ca II)
K	393,4	Calcio ionizzato (Ca II)



HARVARD OBSERVATORY MONOGRAPHS
HARLOW SHAPLEY, Editor

No. 1

STELLAR ATMOSPHERES

A CONTRIBUTION TO THE OBSERVATIONAL
STUDY OF HIGH TEMPERATURE IN THE
REVERSING LAYERS OF STARS

BY
CECILIA H. PAYNE

TABLE XXVIII

Atom Number	Atom	Log ϵ	Atom Number	Atom	Log ϵ	Atom Number	Atom	Log ϵ
1	H	11	13	Al	5.0	23	V	3.0
2	He	8.3	14	Si	4.8	24	Cr	3.9
	He+	12		Si+	4.9	25	Mn	4.6
				Si+++	6.0	26	Fe	4.8
3	Li	0.0	19	K	3.5	30	Zn	4.2
6	C+	4.5	20	Ca	4.8	38	Sr	1.8
11	Na	5.2		Ca+	5.0		Sr+	1.5
12	Mg	5.6	22	Ti	4.1	54	Ba+	1.1
	Mg+	5.5						

PUBLISHED BY THE OBSERVATORY
CAMBRIDGE, MASSACHUSETTS
1925

John G. Withrich Library, Harvard-Smithsonian Center for Astrophysics • Provided by the NASA Astrophysics Data System



Although hydrogen and helium are manifestly very abundant [...] the actual values derived from the estimates are regarded as spurious.

La più brillante tesi mai scritta in astronomia

Sergei e la famiglia (1932-1979)

Good but not brilliant

An unconventional Family, H. Shapley

That bright particular star

1934



1946

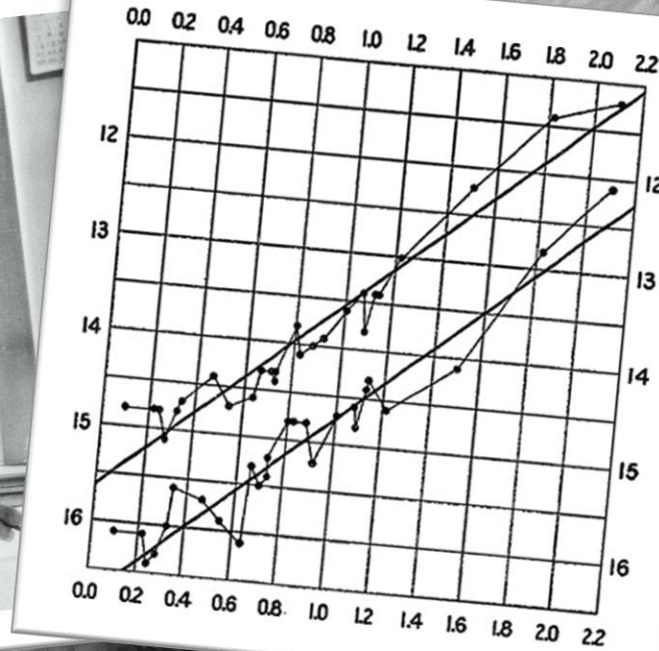
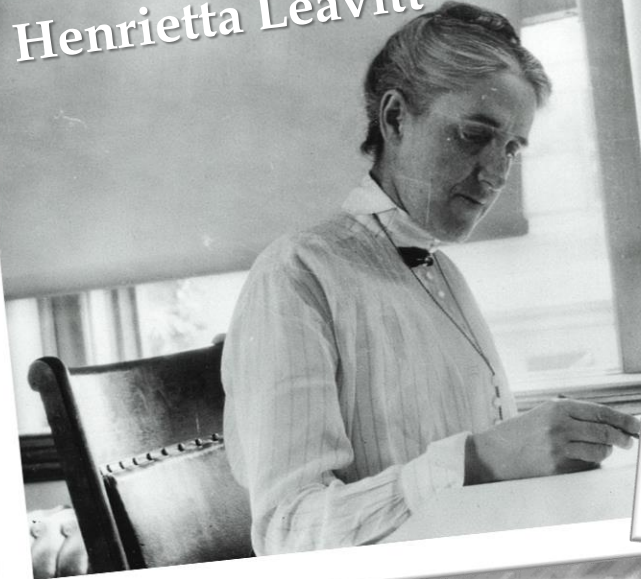


1979



Le stelle variabili, stelle per amatori

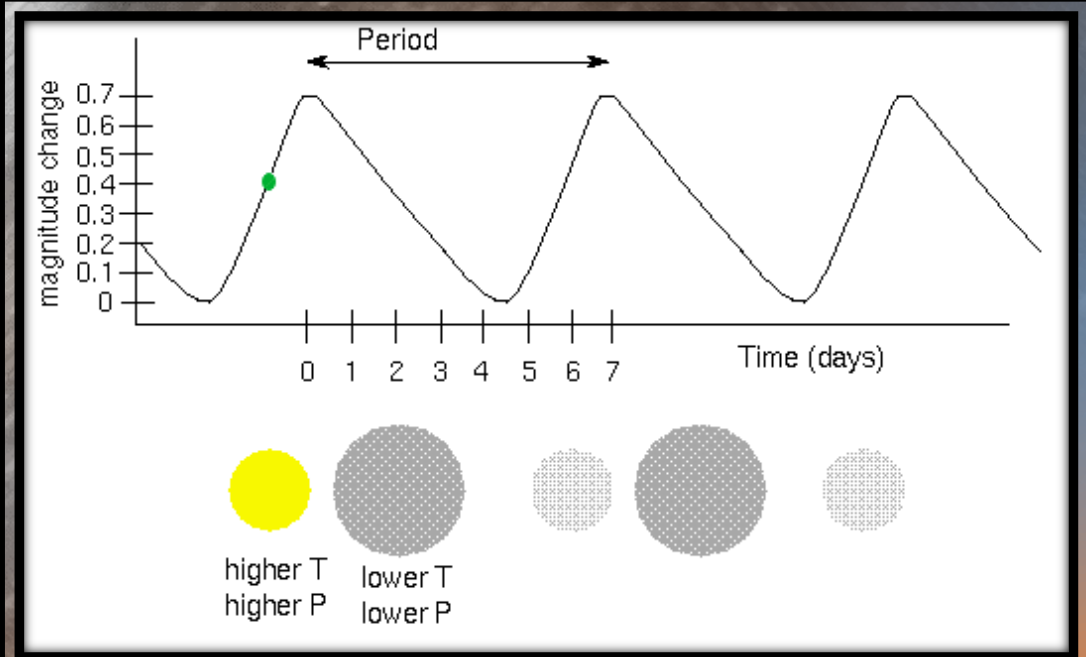
Henrietta Leavitt



Since these variables are probably at nearly the same distance from the Earth, their periods are apparently associated with their actual emission of light... It is to be hoped also that parallaxes of some variables of this type can be measured

It is hoped that a systematic study of the light changes of all the variables may soon be undertaken at this Osservatory

E. Pickering, Circolare 173 del 3 Marzo 1912

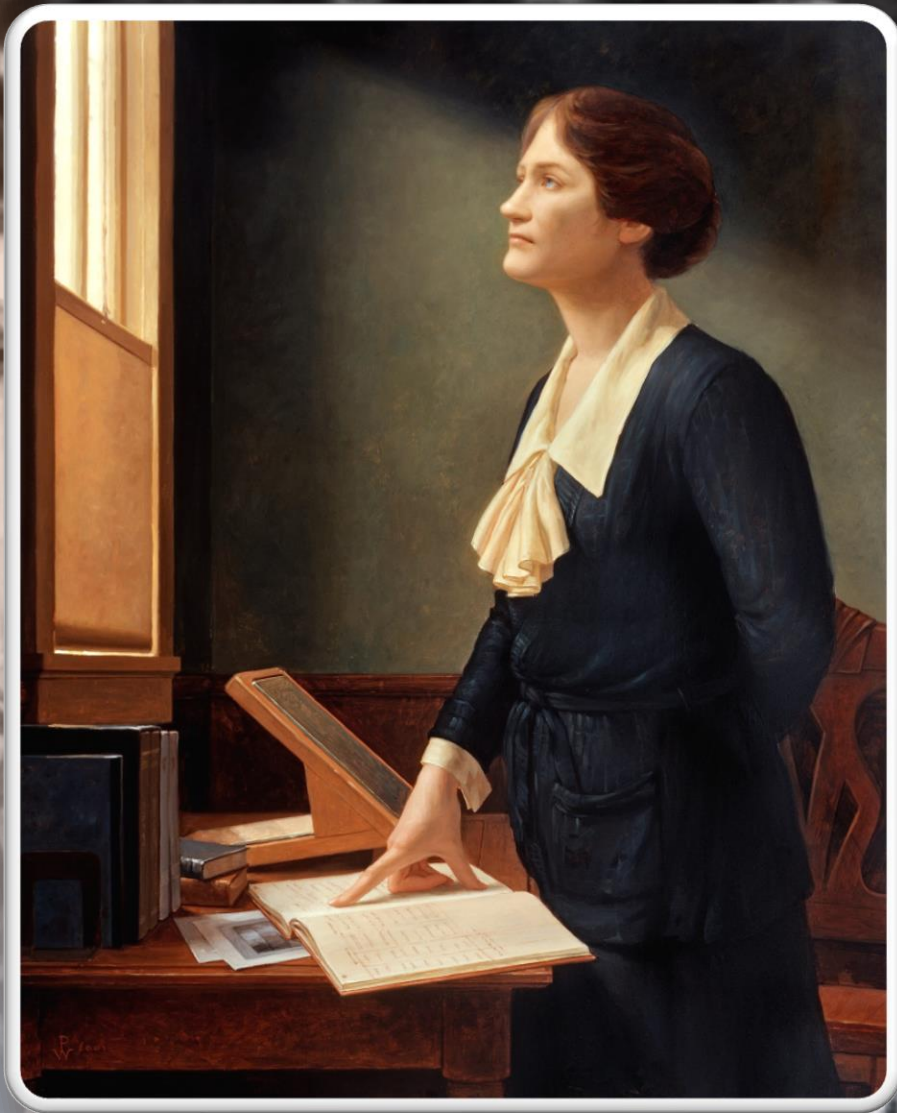


La carriera e i riconoscimenti (1938-1976)

- ✓ 1925 Prima donna a ottenere il Dottorato di ricerca in astronomia
- ✓ 1934 Premio Annie Jump Cannon
- ✓ 1938 Diventa Astronomo dell'osservatorio di Harvard
- ✓ 1956 Prima donna ad ottenere la cattedra di astronomia ad Harvard
- ✓ 1956 Prima donna Direttore di Dipartimento
- ✓ 1976 Premio Henry Norris Russel

Membro della Royal Astronomical Society, dell'American Astronomical Society e dell'American Philosophical Society

Epilogo: l'astronomia botanica



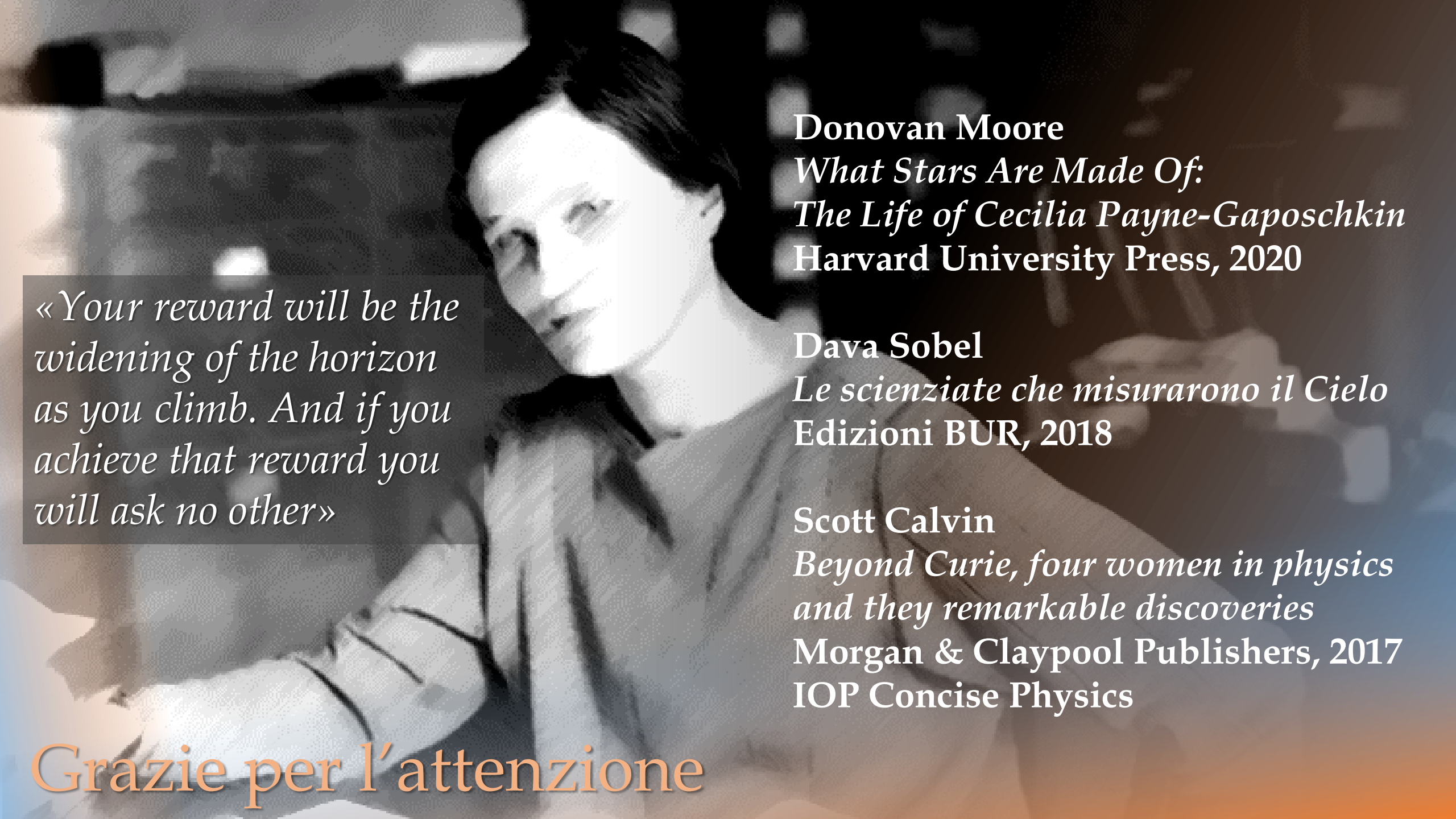
The reward of the young scientist is the emotional thrill of being the first person in the history of the world to see something or to understand something.

The reward of the old scientist is the sense of having seen a vague sketch grow into a masterly landscape

Discorso all' American Astronomical Society, 1976

An inspired seamstress, an inventive knitter and a voracious reader

Katherine Haramundanis, 1979



«Your reward will be the widening of the horizon as you climb. And if you achieve that reward you will ask no other»

Donovan Moore

*What Stars Are Made Of:
The Life of Cecilia Payne-Gaposchkin*
Harvard University Press, 2020

Dava Sobel

Le scienziate che misurarono il Cielo
Edizioni BUR, 2018

Scott Calvin

*Beyond Curie, four women in physics
and their remarkable discoveries*
Morgan & Claypool Publishers, 2017
IOP Concise Physics

Grazie per l'attenzione