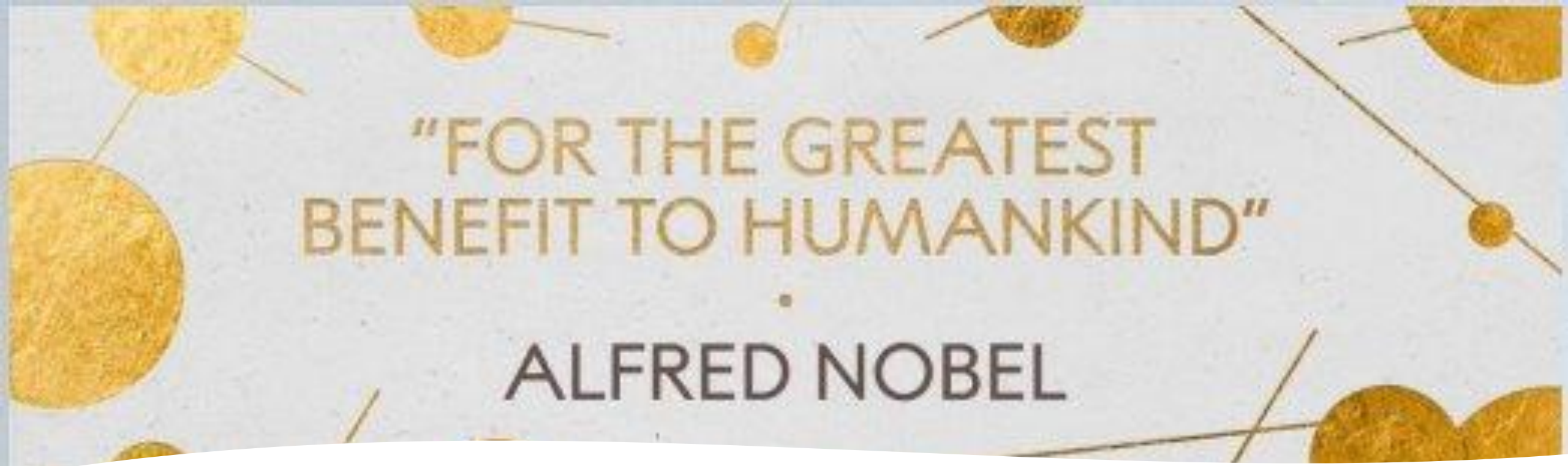
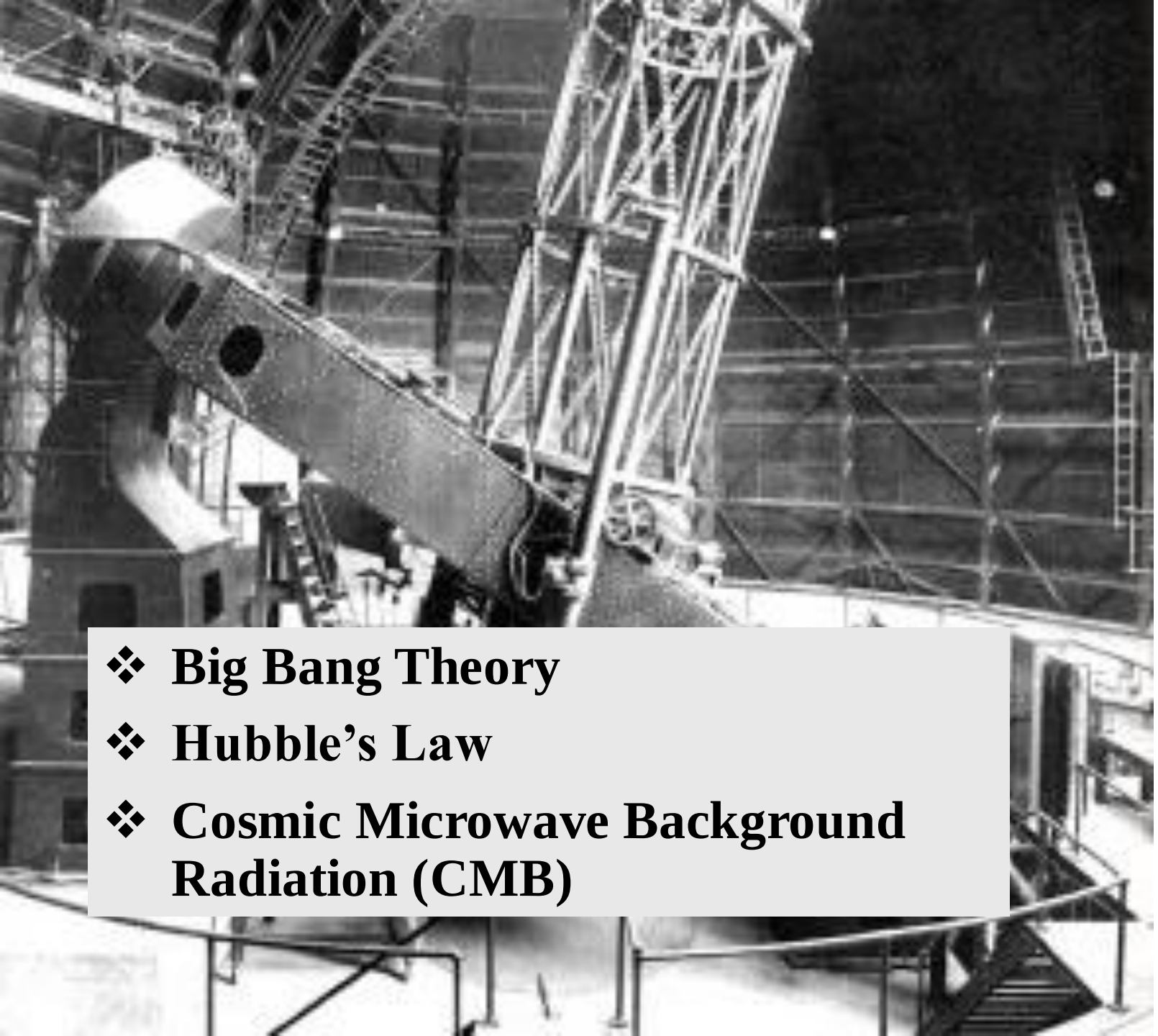


P103 – Nobel Prizes in Physics
Discoveries that Revolutionized Science

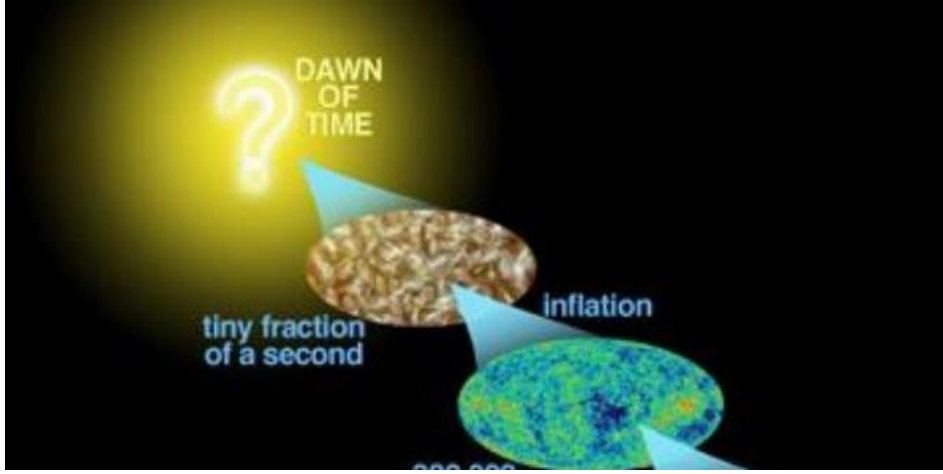
Dr. Nidhi Pant

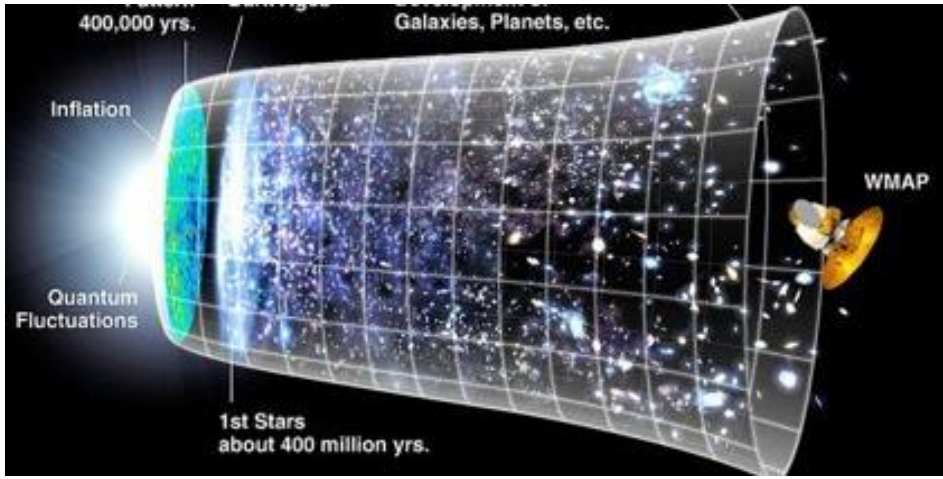
Cosmology

Cosmology is the science of exploring the Universe as a whole

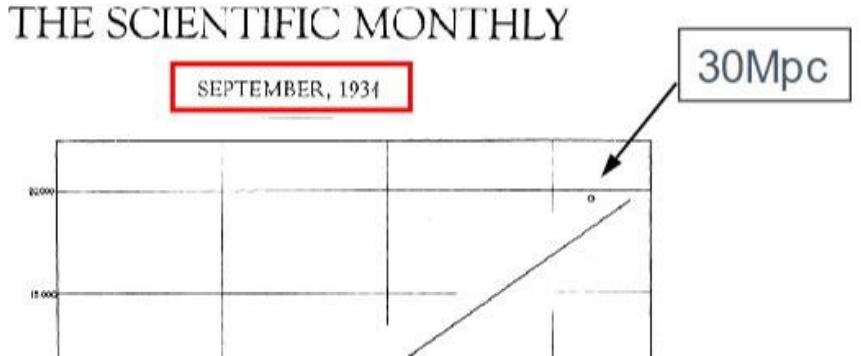


- **Big Bang Theory**
- **Hubble's Law**
- **Cosmic Microwave Background Radiation (CMB)**





More data at further distance!



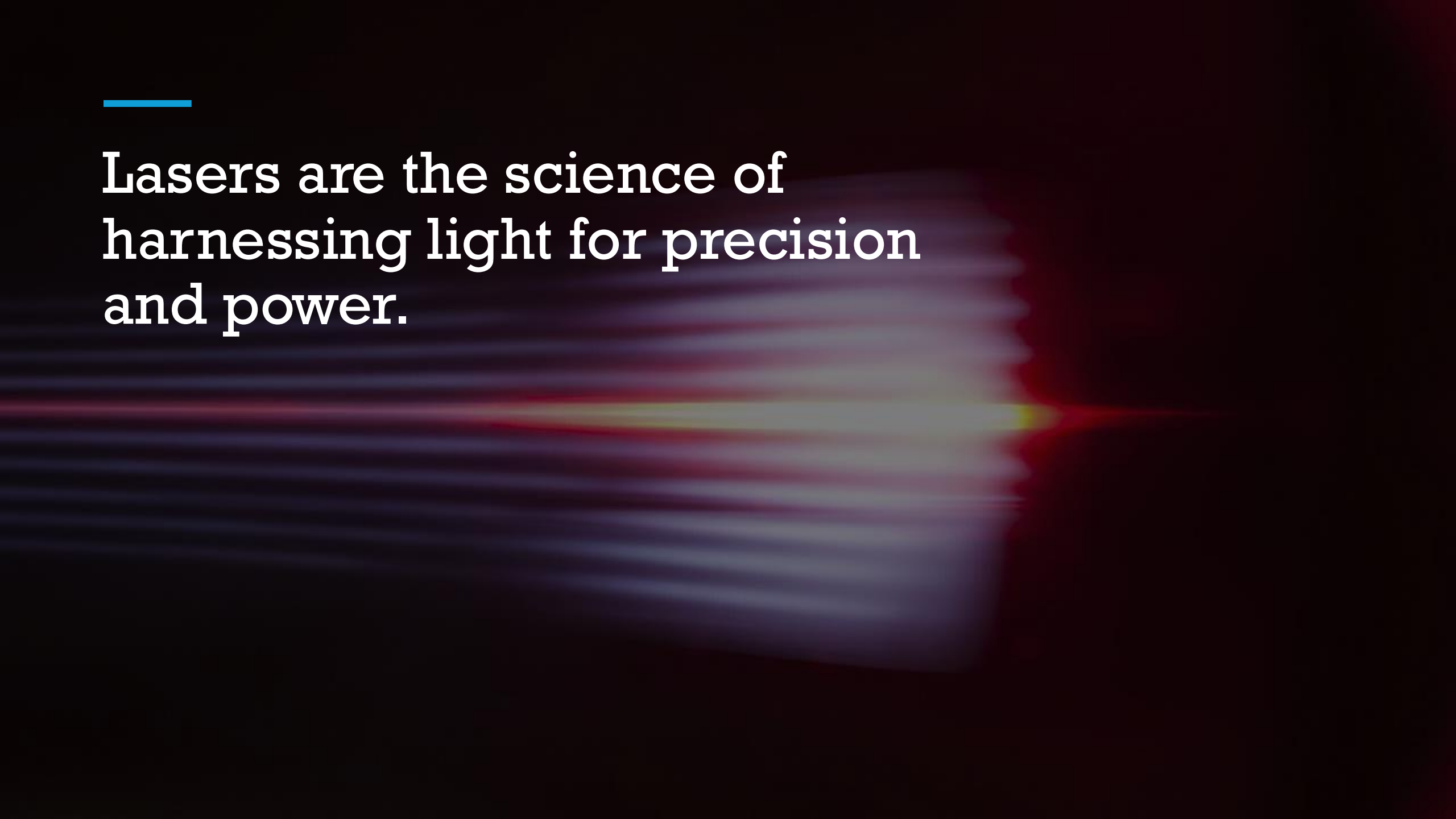
Astronomy

" Without Astronomy, we know nothing of the place we occupy "

Aristotle

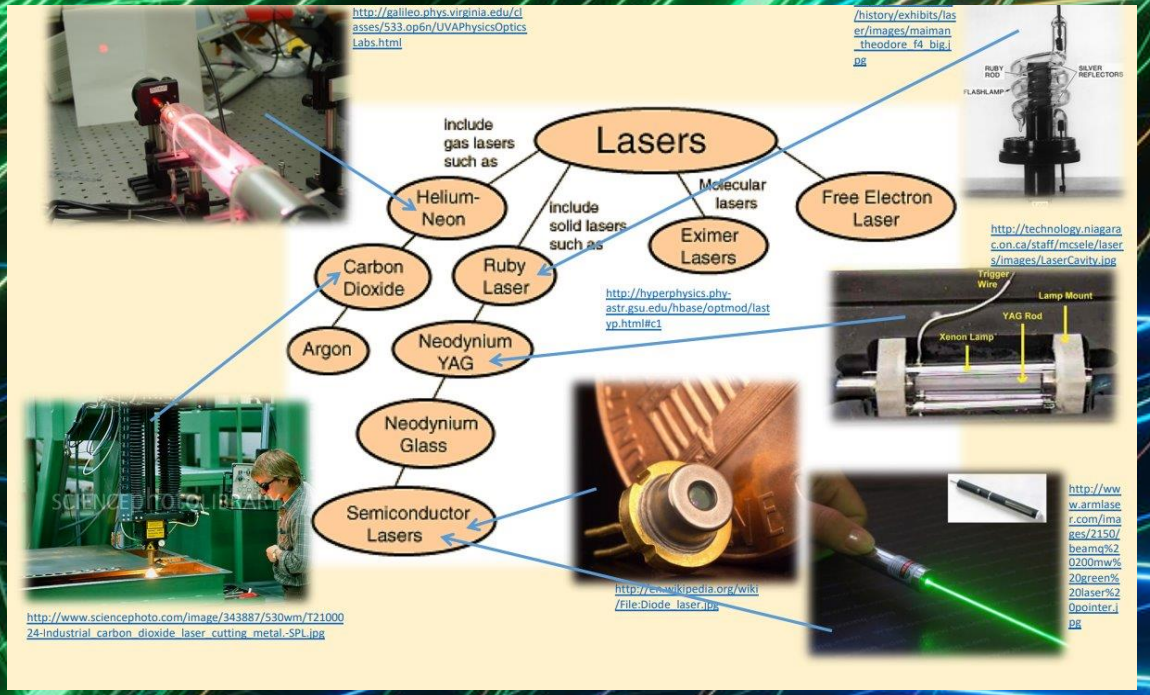
Revolutionizing our astronomy Understanding

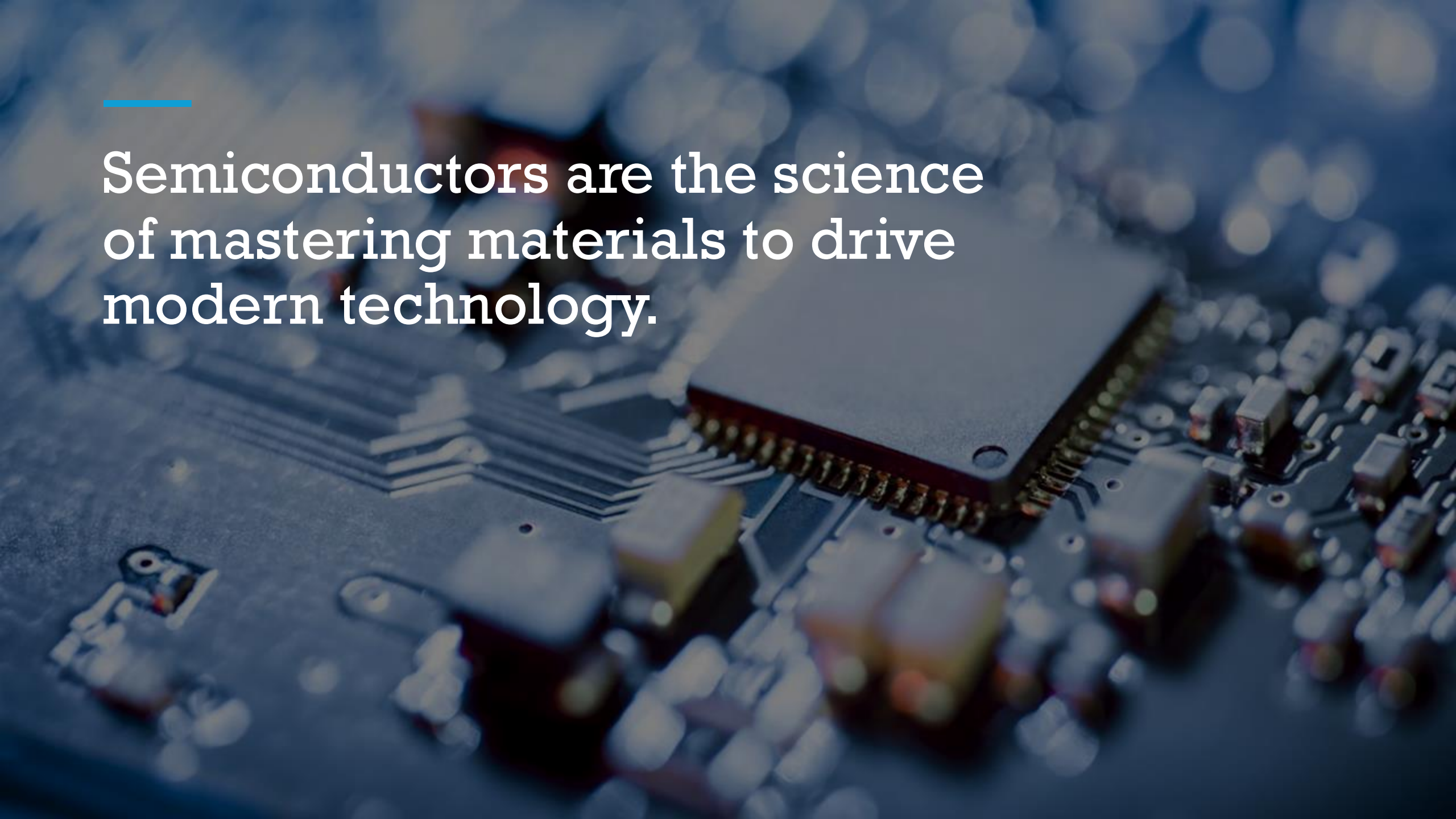
- Stellar Evolution
- Radio and X-ray
- Supernovae
- Extrasolar planets
- Gravitational Waves

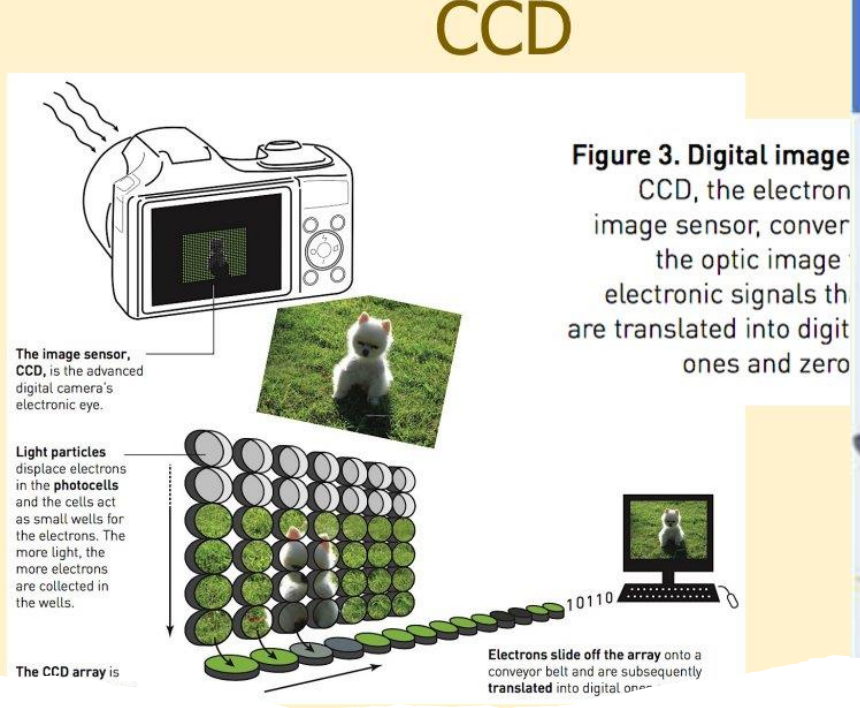

Lasers are the science of harnessing light for precision and power.

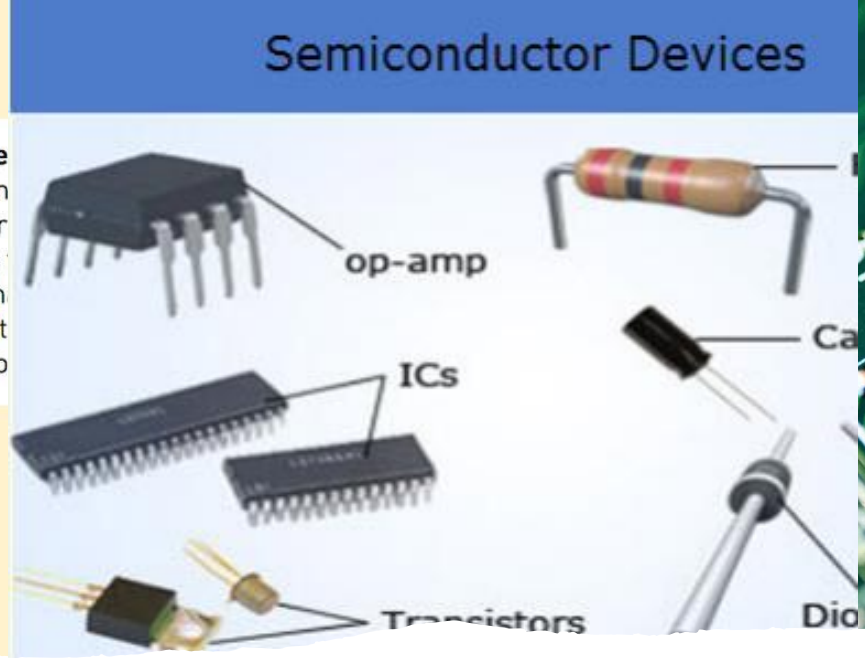
Lasers

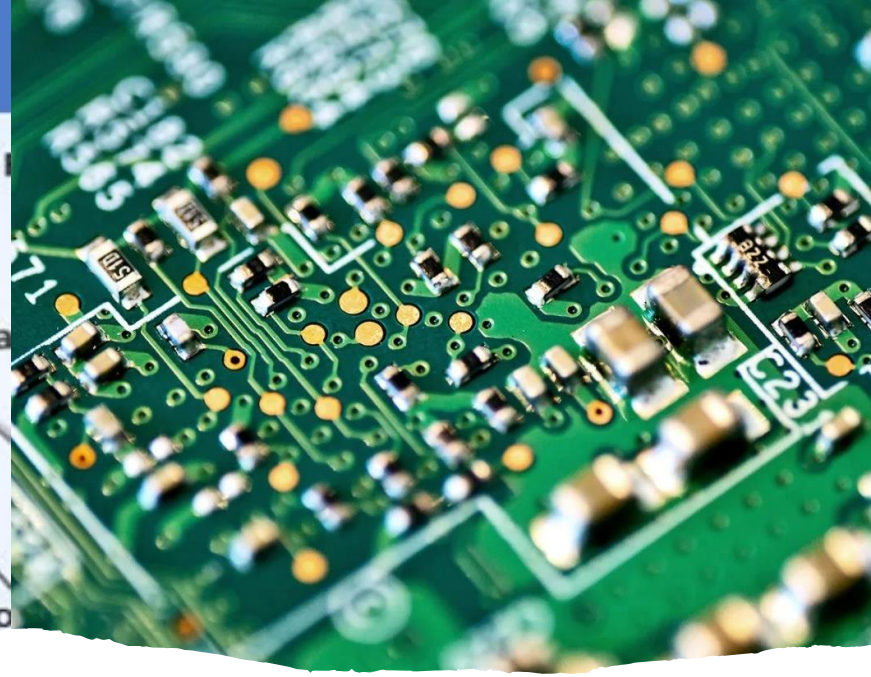
- Stimulated emission
- Lasing mechanism




Semiconductors are the science of mastering materials to drive modern technology.

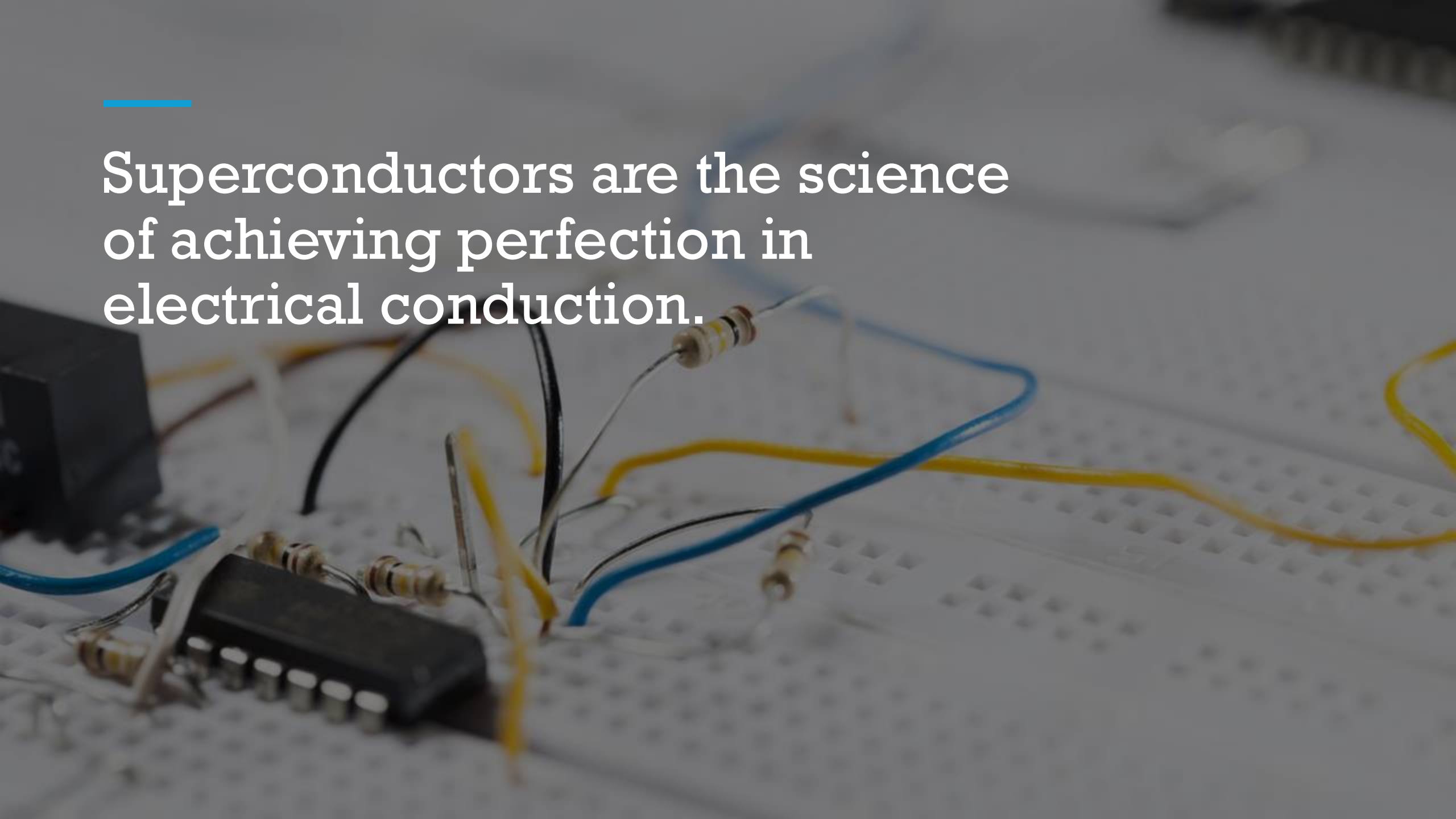






Semiconductors

- ❖ **Transistors**
- ❖ **LEDs**
- ❖ **Integrated Circuits (IC)**



Superconductors are the science of achieving perfection in electrical conduction.

Superconductors

- Superconductivity
- BCS Theory
- High-Temperature Superconductors