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UNIVERSE
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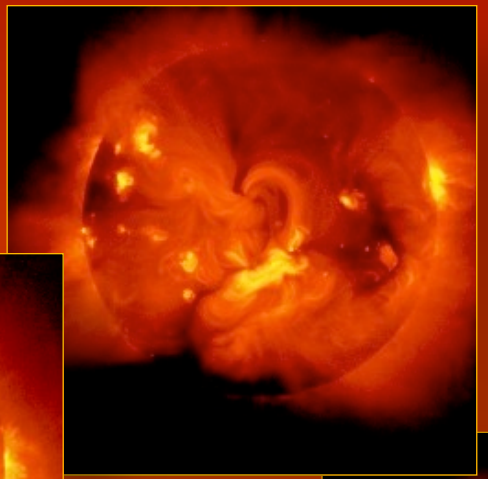
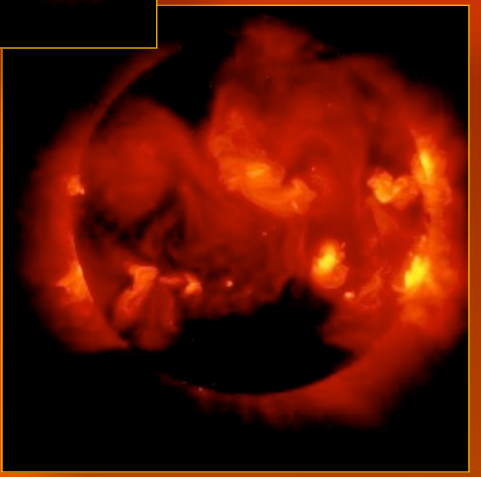
THE UNIVERSE

SUN

ELECTRIC



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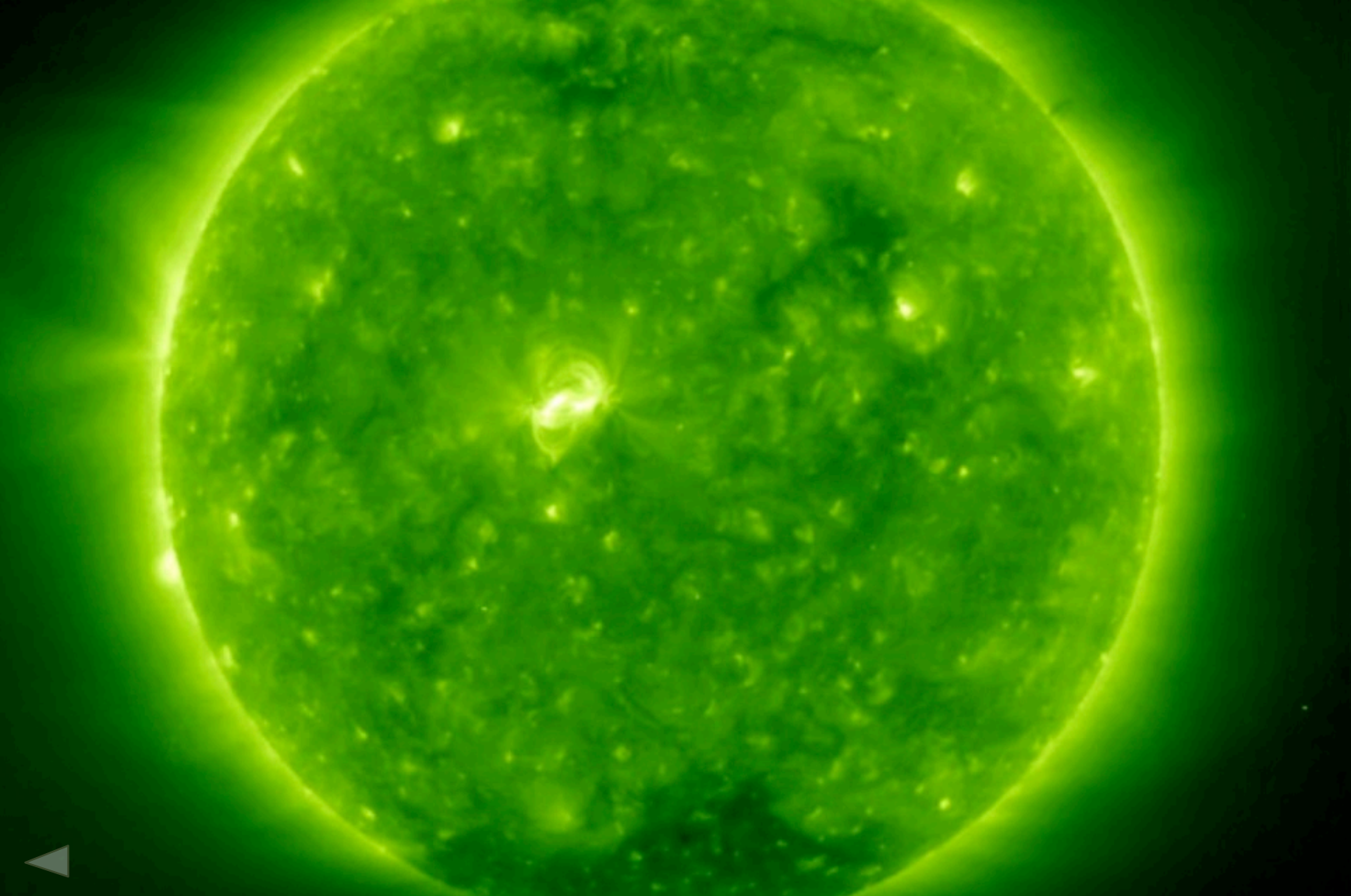

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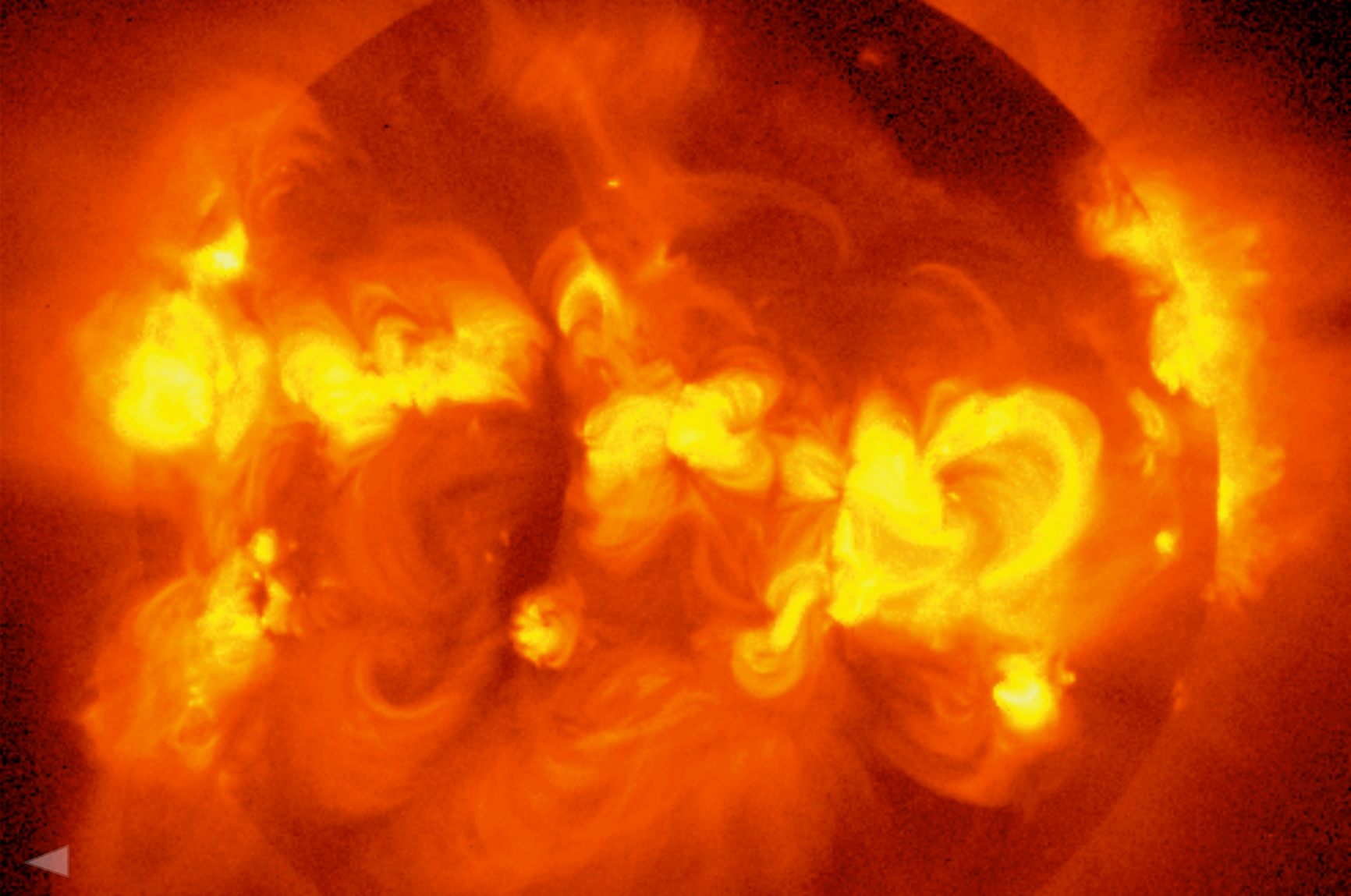
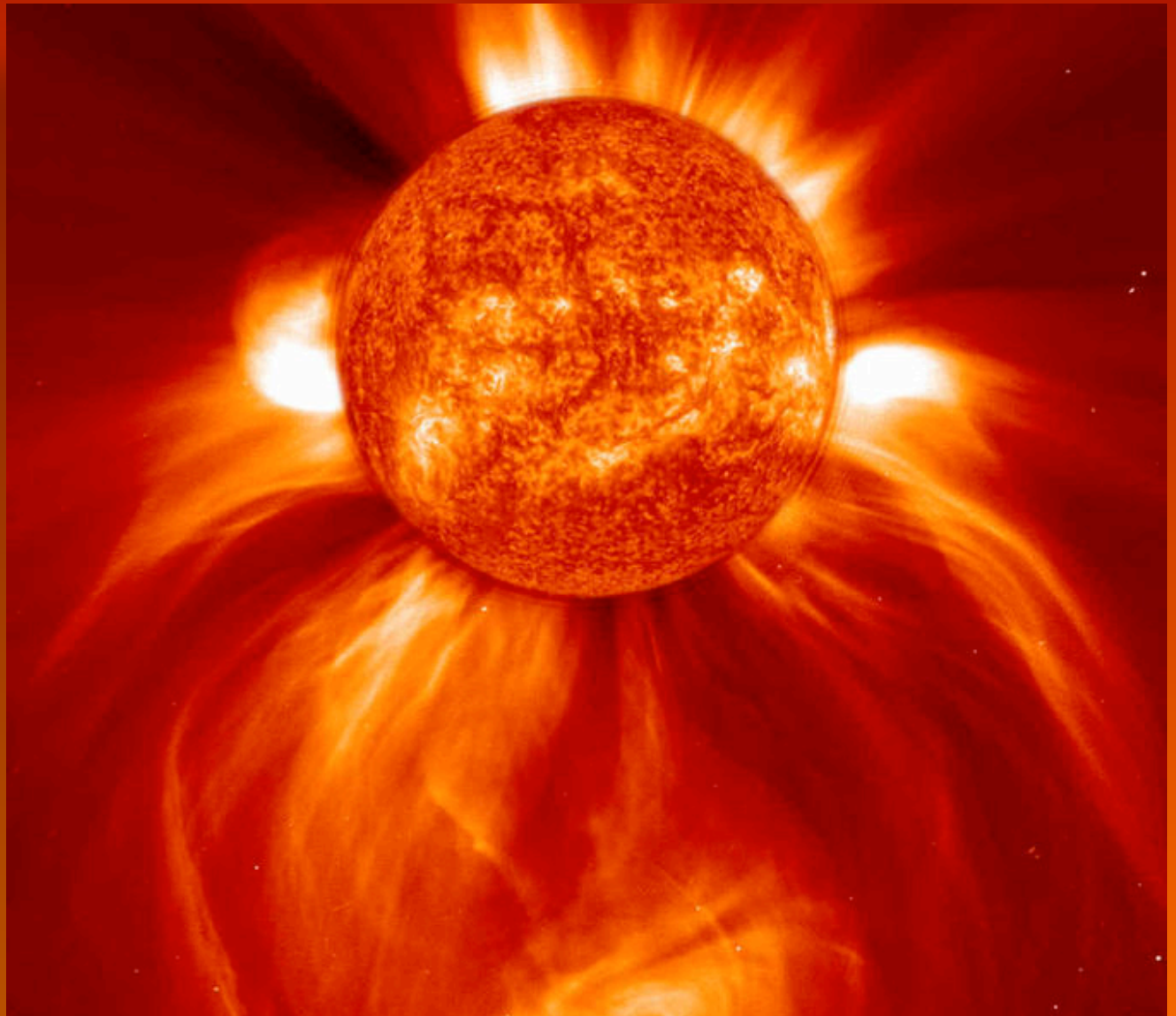


THE SUN

Today, most astronomers believe that the fundamental question about the Sun has been answered: *it is a self-consuming thermonuclear furnace*.



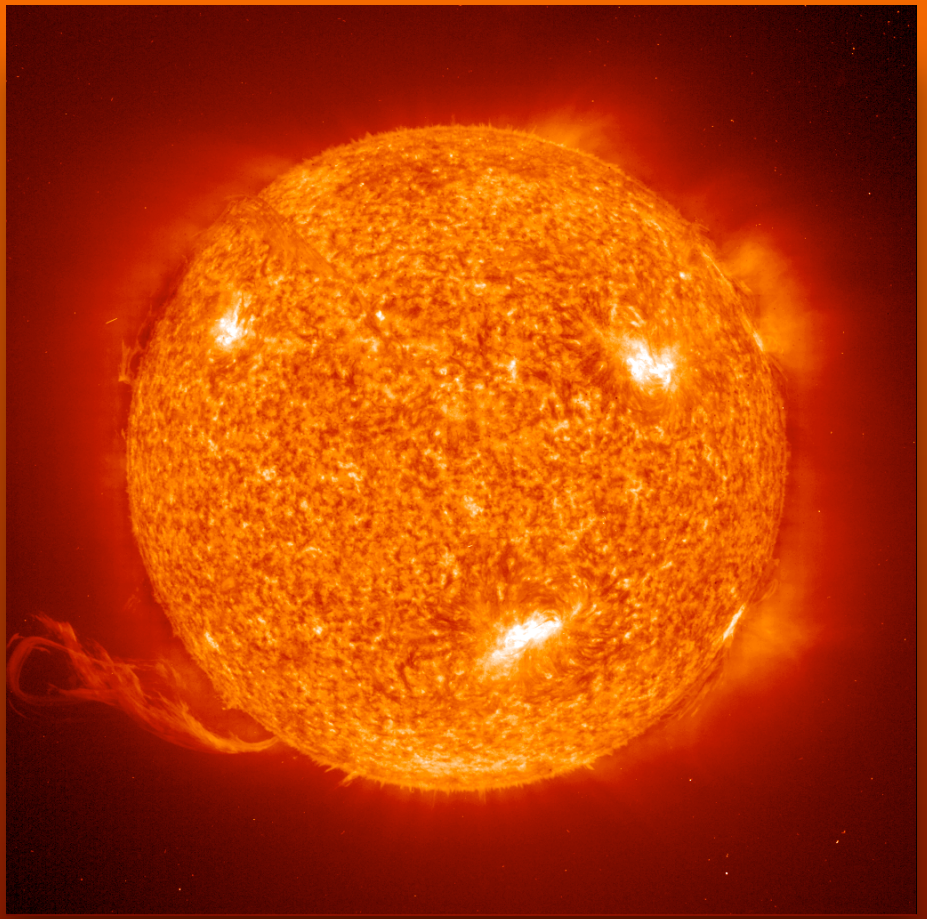
the ‘thermonuclear’ sun

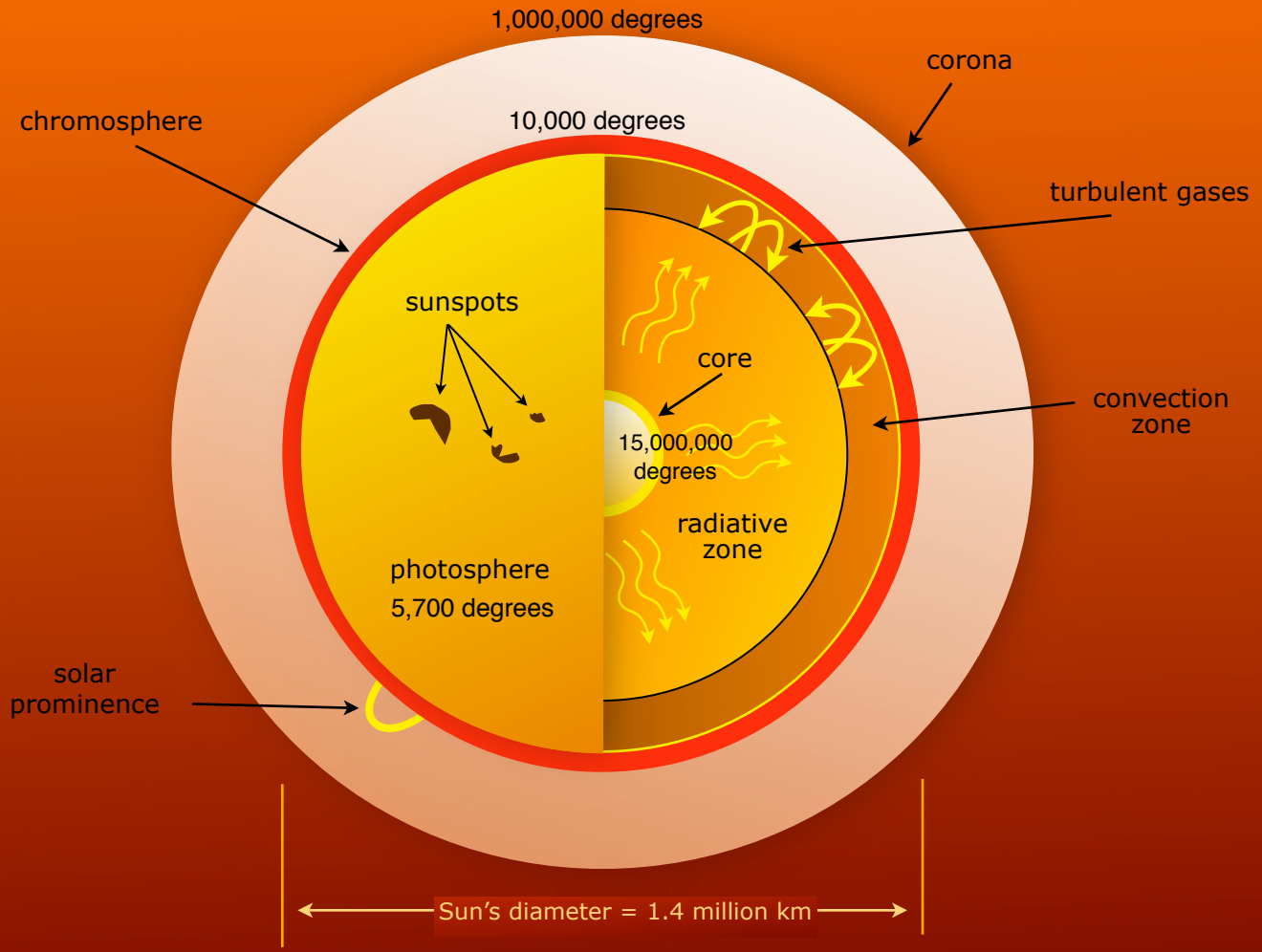
The “thermonuclear” Sun is a ball of gas so large that its internal pressure generates a core temperature of about 15 million°C, enough to produce a continuous thermonuclear reaction.

In this model the Sun’s ‘engine’ is the same as the hydrogen bomb. So how is it that stars show such remarkable stability?

For this thermonuclear reaction to occur, the Sun requires no contribution from the space around it.

The power comes from the sun itself.




1,000,000 degrees
corona
chromosphere
10,000 degrees
turbulent gases
sunspots
core
convection zone
15,000,000 degrees
radiative zone
photosphere
5,700 degrees
solar prominence
Sun's diameter = 1.4 million km

In this model, X-Rays generated in the Sun's thermonuclear core progressively lose energy and 'cool' by collisions as they gradually percolate outwards, taking millions of years to reach the "convection zone."

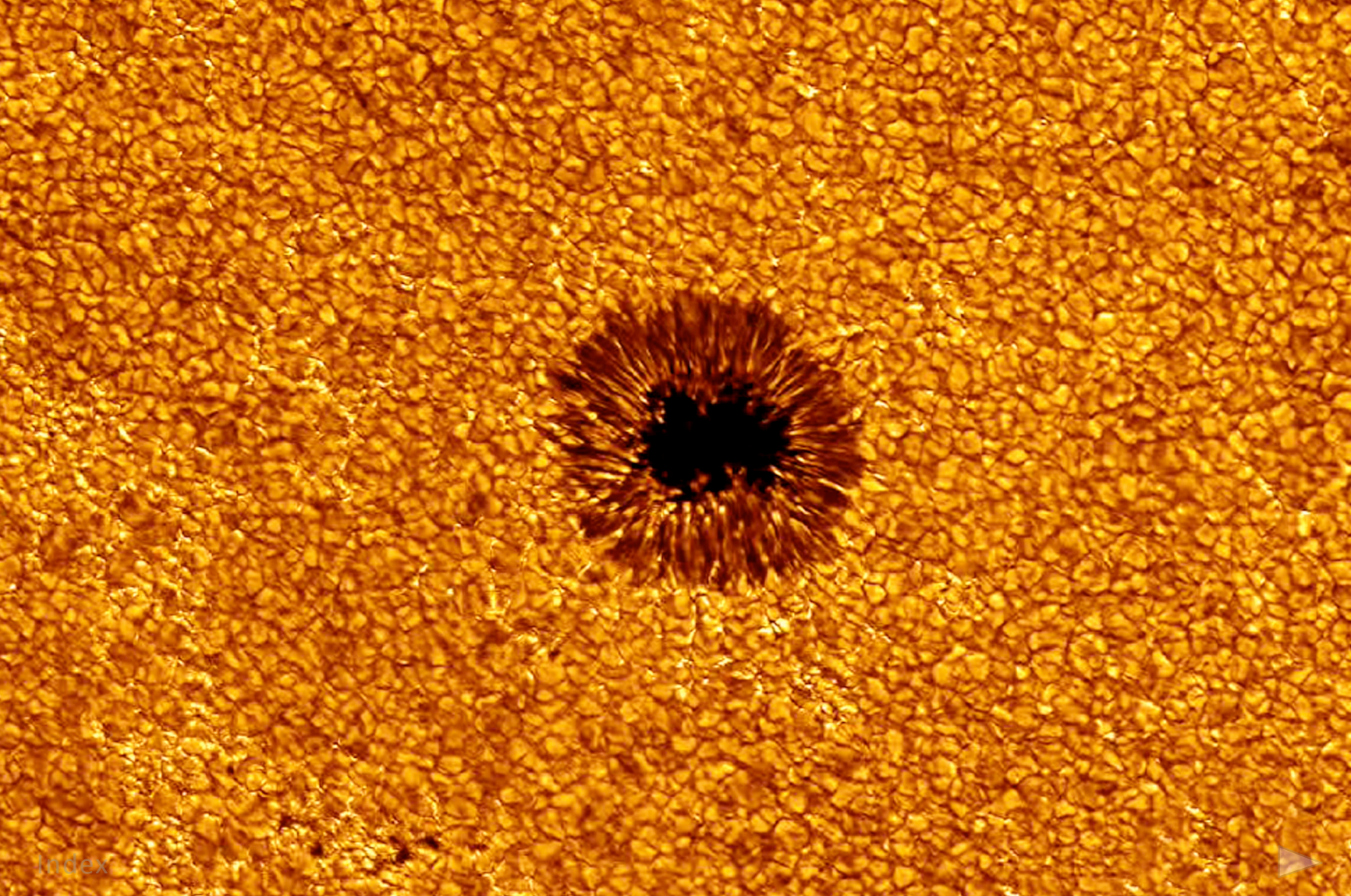
In the convection zone the heated gases become turbulent and – like hot air expanding and rising in the Earth's atmosphere – rush up to the surface as "convection currents," then fall back toward the radiative zone as they cool.

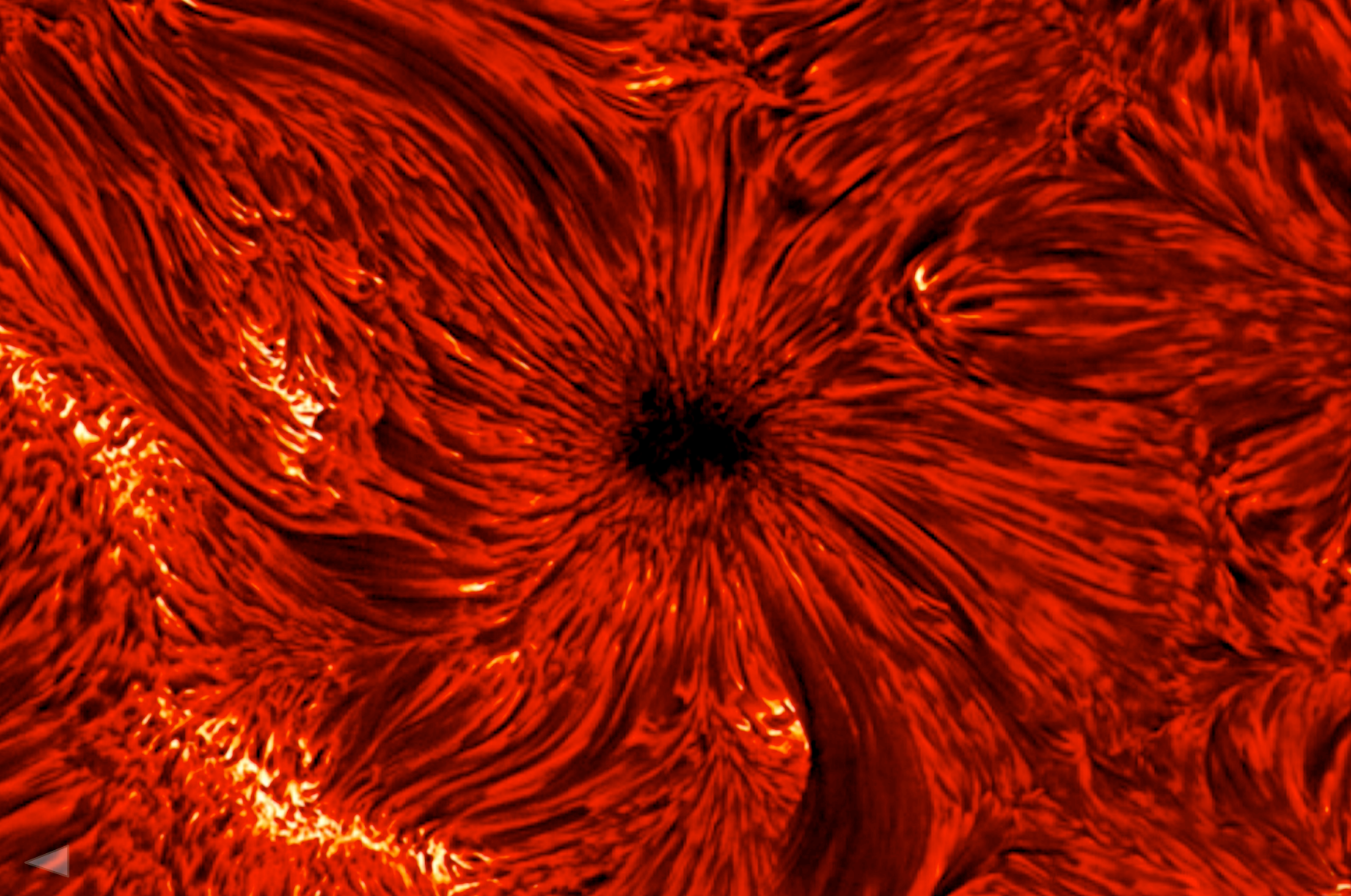
It should be noted that no other known physical body transfers internal heat by radiation.

The visible "granulation" in the photosphere or surface of the Sun is said to be boiling gases as they rise, then cool.

On the margins of the dark regions on the surface, called "sunspots," we see that the granules are the tops of rope-like structures rising from below (right). Solar physicists identify these structures as the “convection currents” that the thermonuclear model calls for.

But the orderly structure and behavior of photosphere "granules" defy any notion of boiling hot gas.

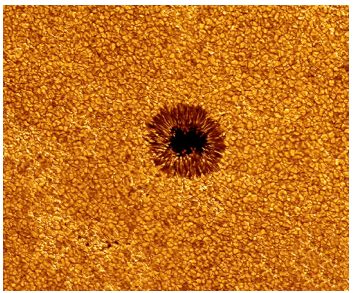


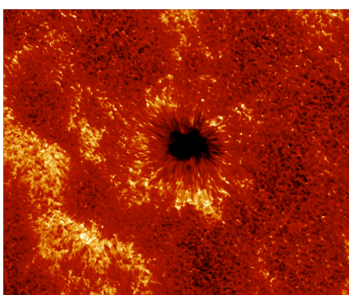


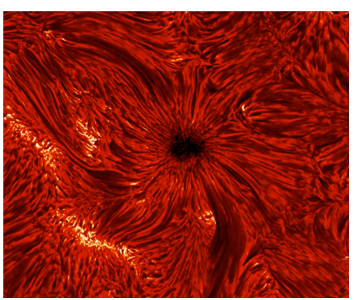
In fact the “ropes” of the sunspot penumbra do not stop at the surface of the photosphere, but extend outward thousands of kilometers into a surrounding maze of filaments, all constrained by complex *magnetic fields*.

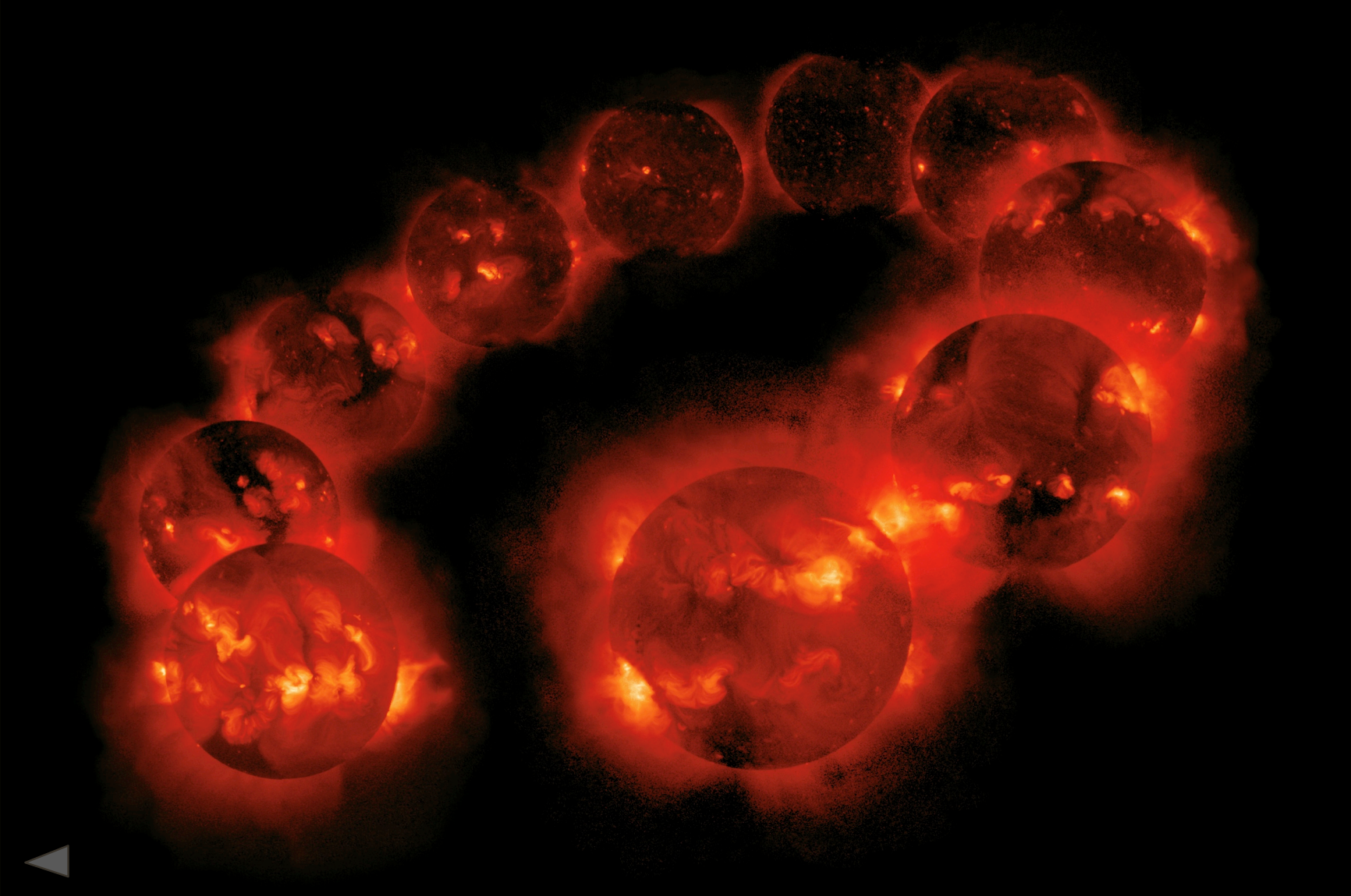
These penumbra filaments bear no resemblance to any known form of convection in a hot gas.

Standard concepts of simple heat transport do not seem to work when applied to sunspot activity.









The above problematic sunspot anomaly is only one of countless anomalies now challenging the traditional concept of the self-powering thermonuclear sun.

The very presence of sunspots is unexpected.

On the right is a list of prominent attributes of the Sun.

Every feature listed poses a problem the thermonuclear model cannot easily explain.

But these features *can* be explained by another model.

the ‘electric’ sun

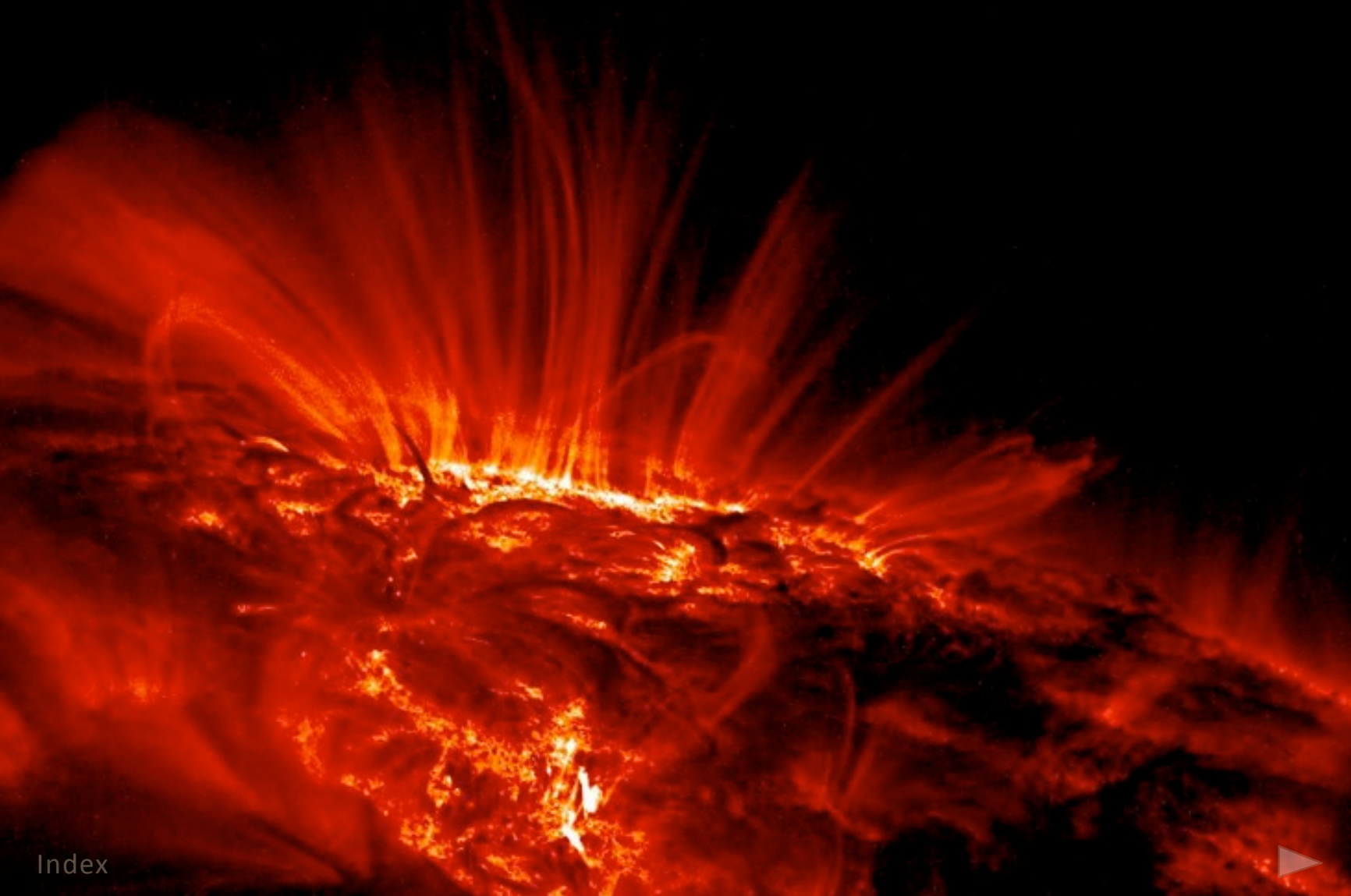
Vast electrical currents stream across interstellar and intergalactic space. These cosmic "power lines" can be detected by the radio "hum" they emit.

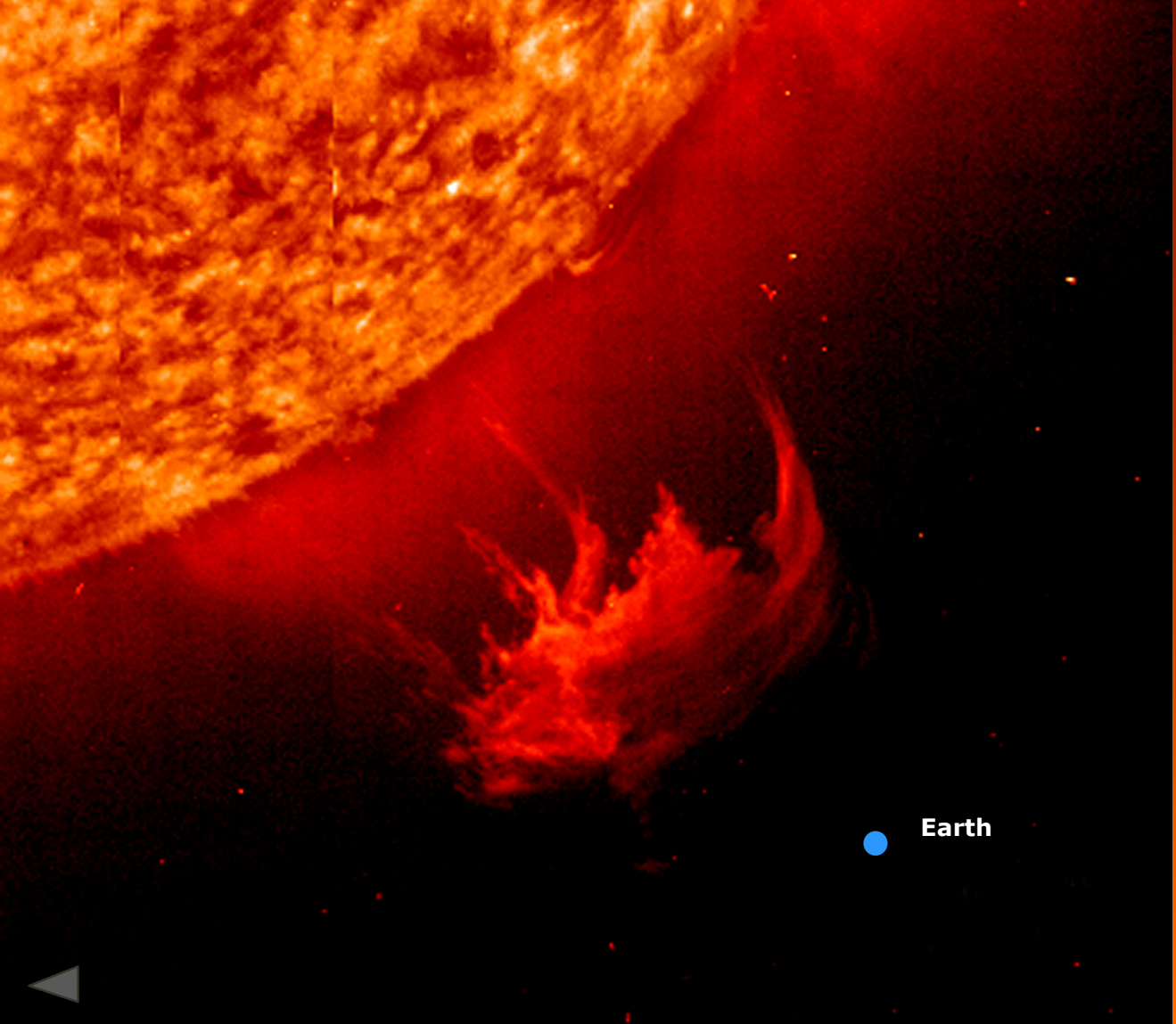
Where two neighboring intergalactic currents cross paths, they draw matter into a spiral vortex to form a spiral galaxy. The galaxy is lit by electric lights — the stars strung along the current streams.

Electric currents in space plasma can provide a new understanding of the Sun.

The Sun’s surface is carpeted with complex magnetic fields. Only electricity can produce magnetic fields. Therefore, the Sun must be understood in terms of electric circuits.

Where are these circuits? What creates them? And what sustains them?





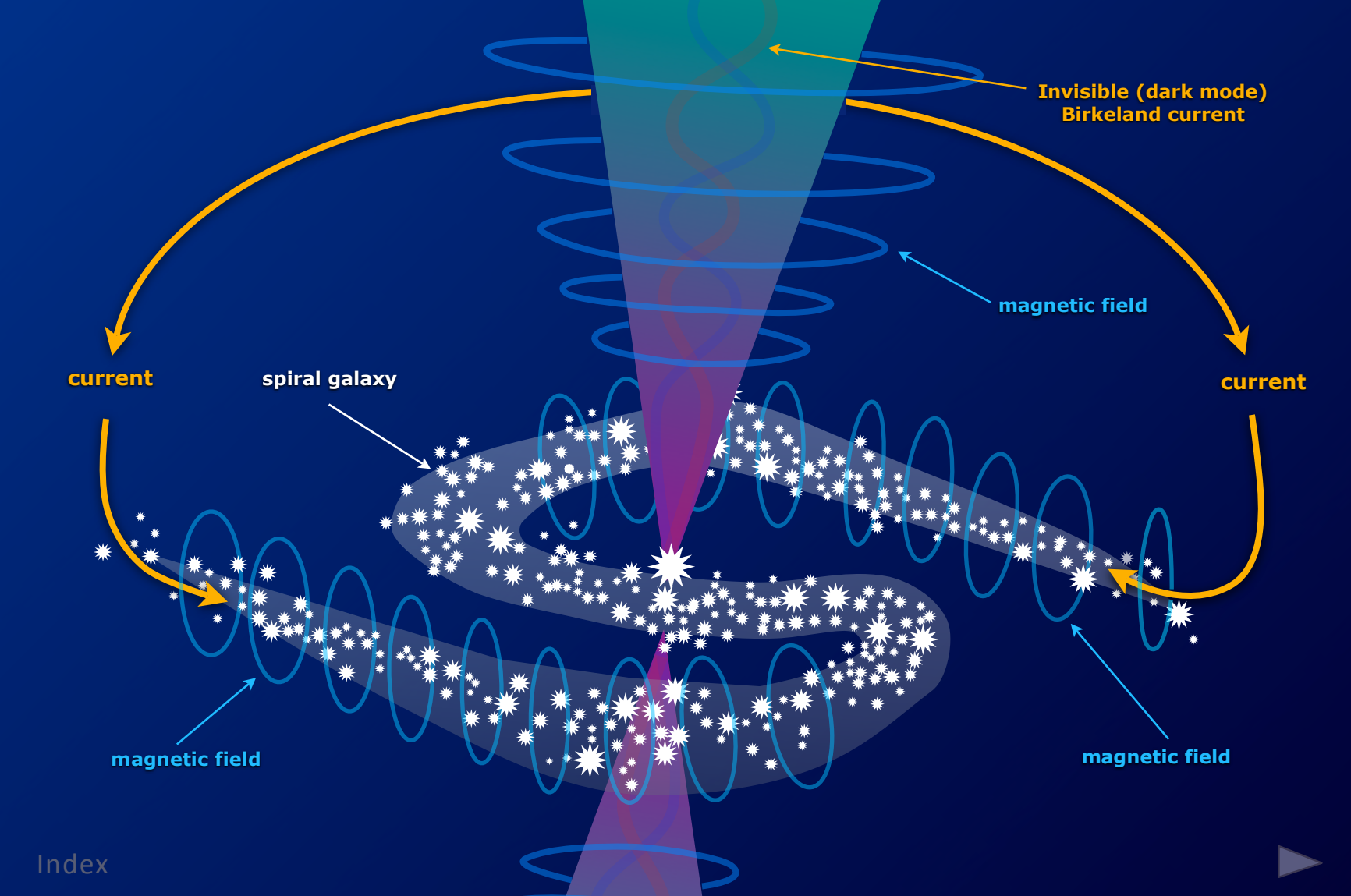
This would be the relative size of Earth next to the sun.

Traditionally, doubts about an electric sun have focused on a simplistic *electrostatic* model. It is well known that electrostatic charge could only sustain the Sun's output for a brief moment.

But Hannes Alfvén pointed out that the Sun and its environment must be understood in terms of *electrodynamics* and *circuit theory*.

Electric current flows inward along the arms of the galaxy, generating an encircling magnetic field.

The magnetic field confines and 'pinches' the galactic plasma into the magnificent spiral arms we see, lit by stars.


Invisible (dark mode)
Birkeland current
magnetic field
current
spiral galaxy
current
magnetic field
magnetic field

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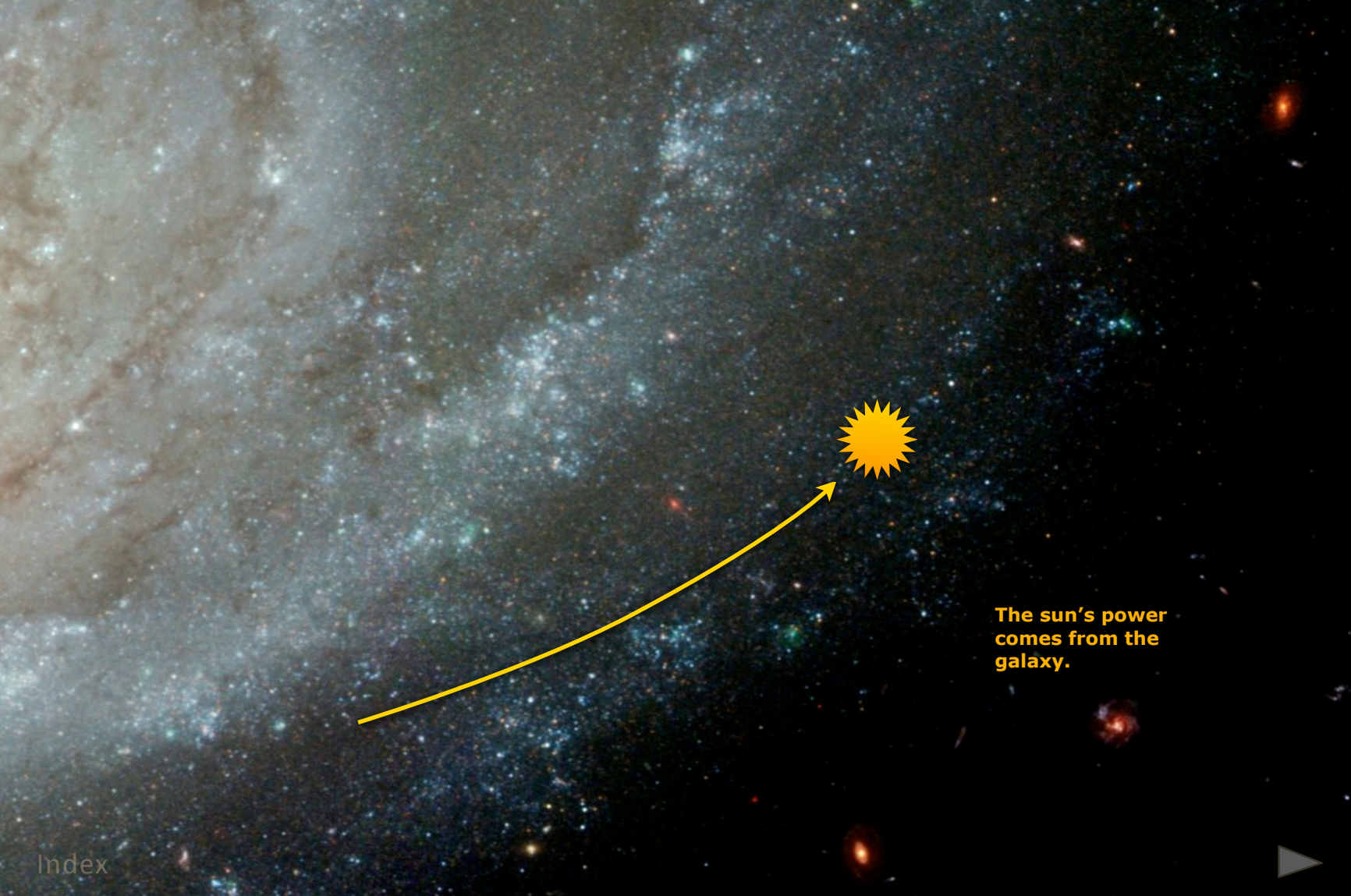
The current, on reaching the galactic center, is stored in a compact *plasmoid* – a donut-shaped electromagnetic plasma structure. The plasmoid occasionally releases its stored energy in jets along the spin axis, at which time it is called an 'active galactic nucleus'.

This plasmoid is typically hidden by surrounding dust.

M82 is an active galaxy spewing jets along the polar axis.


The sun’s power comes from the galaxy.