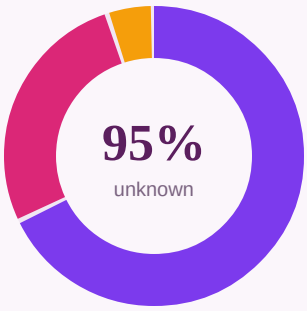
Can science prove palmistry?

Not yet. And science hasn't explained most of the universe either. Six great mysteries, in their sources' own words.



What the universe is made of

- **Dark energy 68%** *"scientists know even less about it than they do about dark matter"*
- **Dark matter 27%** *"they're not sure what it is"*
- **Normal matter 5%** *Everything we can directly observe*

NASA Science, rounded shares

Six questions science hasn't answered

ASTROPHYSICS

What is most of the universe made of?

"While scientists have measured that dark matter makes up about 27% of the cosmos, they're not sure what it is."

NASA Science

PHYSICS

How does gravity fit with quantum theory?

"No one has managed to make the two mathematically compatible in the context of the Standard Model."

CERN

CHEMISTRY AND BIOLOGY

How did life begin?

"How life got started on Earth is a mystery."

NASA Astrobiology

NEUROSCIENCE

How does the brain give rise to awareness?

"There have been a number of advances in the search for the neural correlates of consciousness"

Koch, Massimini, Boly & Tononi, Nature Reviews Neuroscience, 2016

MEDICINE

Why can expecting to feel better help you feel better?

"The placebo effect is a beneficial health outcome resulting from a person's anticipation that an intervention will help."

NCCIH, National Institutes of Health

MATHEMATICS

Can one system settle every statement by proof?

"there are statements of the language of F which can neither be proved nor disproved in F."

Stanford Encyclopedia of Philosophy, on Gödel's first incompleteness theorem

When science changed its mind

Moving continents: 1915 – Alfred Wegener publishes his theory of continental drift. The view then: “severely attacked from the start and never gained acceptance in his lifetime.” **1960s** – His ideas become the framework for plate tectonics, "three decades later". (USGS, This Dynamic Earth)

Stomach ulcers: 1982 – Marshall and Warren find the bacterium Helicobacter pylori. The view then: “stress and lifestyle were considered the major causes of peptic ulcer disease.” **2005** – They win the Nobel Prize: the bacterium causes most ulcers. (The Nobel Prize press release, 2005)

Intuition in the lab

Bechara, Damasio, Tranel & Damasio (Science, 1997): “Normals began to choose advantageously before they realized which strategy worked best.” Still debated: Maia & McClelland (PNAS, 2004) found “participants have much more knowledge about the game than previously thought.”

Holding both

Let science answer science questions: for health, money and legal decisions, use evidence and professionals. Let palmistry do what it does well: reflection, character and intuition. Stay curious in both directions.