

# THEORIES ON EXTRATERRESTRIAL LIFE

EXTRATERRESTRIAL LIFE IS A CRAZY THING. UNFORTUNATELY, WE ARE NOT 100% CERTAIN ON SUCH A THING. HERE ARE DIFFERENT OPINIONS ON WHETHER OR NOT THERE IS LIFE BEYOND EARTH AND SOME EVIDENCE AS WELL.

## YES!

## NO!

THERE ARE MULTIPLE POINTS OF EVIDENCE BELOW THAT SUPPORT THE THEORY OF EXTRATERRESTRIAL LIFE IN OUR GALAXY. A LEADING ARGUMENT IS THAT HOW COULD ONE PROVE THAT THERE ISN'T? THAT IN ITSELF CAN PUSH THE WORLD IN THE DIRECTION THAT THERE IS ALMOST DEFINITELY LIFE OUT THERE NO MATTER HOW YOU PUT IT. ESPECIALLY CONSIDERING THE EVIDENCE BELOW.

IT HAS TO BE ALMOST IMPOSSIBLE FOR LIFE ANYWHERE ELSE TO EXIST. THE CHANCES ARE SO CLOSE TO 0 AND THERE ISN'T NECESSARILY A WAY TO PROV OTHERWISE ATLEAST NOT FOR MANY ERAS. A LOT OF THE EVIDENCE BELOW HAS ALSO BEEN COMPROMISED, CHALLENGED, AND SOME HAS EVEN BEEN PROVEN TO BE SOMEWHAT FALSE.

# FACTS AND EVIDENCE

### 1976 VIKING MARS LANDER CHEMICALS:

IN 1976, TESTS WERE PERFORMED ON THE MARTIAN SOIL SAMPLES FROM NASA'S VIKING LANDERS. CHEMICALS WERE DISCOVERED THAT SEEMED TO HINT AT CHEMICAL EVIDENCE OF LIFE. AN EXPERIMENT MIXED SOIL WITH RADIOACTIVE-CARBON-LABELLED NUTRIENTS AND WAS TESTED PRODUCTION OF RADIOACTIVE METHANE GAS. THIS TEST HAD A POSITIVE RESULT WHICH SUGGESTED THAT SOMETHING IN THE SOIL COULD METABOLISE THE NUTRIENTS AND PRODUCE RADIOACTIVE GAS. ALTHOUGH, OTHER EXPERIMENTS TESTED FALSE SO NASA SIMPLY DECLARED IT AS A FALSE POSITIVE.

### MARTIAN FOSSILS FOUND IN METEORITE ALH84001 FROM ANTARCTICA IN 1996:

NASA SCIENTISTS CLAIMED TO HAVE FOUND FOSSILISED MICROBES IN A POTATO-SHAPED LUMP OF MARTIAN ROCK. AFTER AN IN-DEPTH ANALYSIS, IT WAS SHOWN THAT THE ROCK CONTAINED ORGANIC MOLECULES AND TINY BITS OF THE MINERAL MAGNETITE WHICH IS SOMETIMES FOUND IN EARTH BACTERIA. EVEN STILL, SINCE THEN; A LOT OF THAT EVIDENCE HAS BEEN CHALLENGED. SOME SCIENTISTS EVEN SUGGEST THAT THE MOLECULES WERE NOT EVEN CLOSE TO RESEMBLING THE MOLECULES IN EARTH BACTERIA.

### CALCULATIONS TO THE 1960'S "DRAKE EQUATION" SHOWS THAT OUR GALAXY COULD HAVE HUNDREDS OF THOUSANDS OF PLANETS THAT BEAR LIFE:

US RADIO ASTRONOMER FRANK DRAKE DEVELOPED AN EQUATION IN 1961 TO HELP ESTIMATE THE NUMBER OF INTELLIGENT LIFE-BEARING PLANETS WHICH COULD BE CAPABLE OF COMMUNICATING WITH US THROUGHOUT THE GALAXY. THIS EQUATION MULTIPLIES SEVEN FACTORS TOGETHER INCLUDING THE FORMATION RATE OF STARS SIMILAR TO OUR SUN, THE PERCENT OF EARTH-LIKE PLANETS AND THE PERCENT OF THOSE ON WHICH LIFE IS DEVELOPING. OBVIOUSLY THIS COULD BE HUGELY UP TO DEBATE, BUT DRAKE HIMSELF CAME TO AN ESTIMATED CONCLUSION THAT THERE ARE ABOUT 10,000 COMMUNICATING CIVILIZATIONS WITHIN OUR GALAXY.