

LIFE:

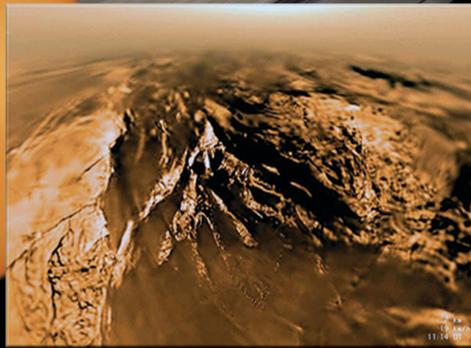
What is it?

Where is it?

How do we find it?

SATURN

TITAN
a moon of Saturn



What lies within and below Titan's thick atmosphere?

JUPITER

EUROPA
a moon of Jupiter



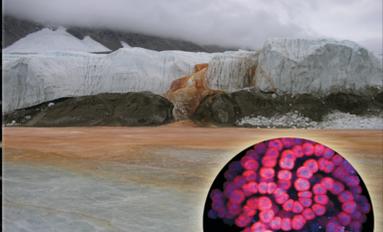
Does life exist in a liquid water ocean on Europa?

MARS



Does water on Mars mean life on Mars?

COLD



Blood Falls, Lake Bonney, McMurdo Dry Valleys, Antarctica

These bacteria live in liquid water pockets deep in the lake ice

HOT



Hot Spring in Yellowstone National Park

Photosynthetic bacteria thrive in the warm margins of hot springs

DEEP



Floor borehole, Lupin gold mine, Nunavut Territories, Canada

These bacteria live in saline groundwater trapped below permafrost in the mine

OCEAN DEPTHS



"Black Smoker" along Mid-Atlantic ocean ridge

Tube worms are often part of hydrothermal vent ecosystems

ACID



Rio Tinto, Spain

This acidophilic fungus lives in low pH and high metal concentrations in the water

ASTROBIOLOGY