energy interacts with biota in the oceans, is one of the most profound issues in science, one that relates every bit as much to how we interpret the future of our planet. If we consider that there are 10^{11} stars in our galaxy, and, based on the present rate of planet discovery in other solar systems, we can estimate that between 1 and 10% of the stars on our galaxy have one or more orbiting planets. Assuming that the accretion phenomenon that gave rise to our planetary system also gave rise to at least some other planetary systems (i.e., that inner planets are lithospheric and the outer planets have less dense cores), and assuming, purely on statistical grounds, that 1% of those planets is within a zone of habitability, we can conservatively estimate that there are between 10^6 and 10^7 planets capable of maintaining a film of liquid water on their surfaces. That is a large number indeed, and the knowledge of biological and optical oceanographers can contribute to their discovery.

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