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**Extraterrestrial life in light of recent planetary science**

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Since at least the time of the Greeks, we have wondered whether the universe cares about us. Is the universe friendly to life, with fecund planets scattered through the heavens? Or is it indifferent, with our green globe a fluke among barren rocks? Modern scientists articulate this puzzle in the form of the anthropic principle, and try to quantify it with the Drake equation. Both seek to link the science we find in our corner of the universe to truly cosmological claims about life and the laws of nature. Until very recently, these questions have been accessible only to speculation. But the amazing progress in planetary science of the last two decades has finally given us an opportunity to begin to test these ideas. This paper will examine how our recent studies of planets within and beyond our solar system may help us grapple with the riddles of the anthropic principle and how life fits into a universe of natural laws.