

Abstract Submitted  
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**Why 400 Years to Discover Countless Planets?** PAUL H. CARR,  
AF Research Laboratory Emeritus — In 1584, Dominican monk Giordano Bruno envisioned the stars as “countless suns with countless earths, all rotating around their suns.” Searching for intellectual freedom, he fled his native Italy to Protestant Switzerland and Germany, but in 1600 the Roman Inquisition condemned him for heresy. He was burned at the stake. Fast-forwarding to 1995, the Swiss astronomers Michel Mayor and Didier Queloz announced the discovery of a planet orbiting a star similar to our sun (51 Pegasi). In 2010, 500 planets had been found orbiting 421 stars. On Feb 2, 2011, NASA announced 1200 planet candidates. It took 400 years for telescope technology to advance and for Copernicus, Galileo, Newton, Bradley, and Foucault to make major contributions, culminating in today’s astrophysics with digital imaging and processing. Contrasting with Bruno, in 2010 Dominican Francisco Ayala, who had been president of the Sigma Xi and AAAS, won the \$1.6M Templeton Prize for affirming life’s spiritual dimension.

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