

Senior Research Presentation

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Einstein, Sagan, and Cosmic Religion

Physicists often work well outside of the public spotlight, but occasionally one will achieve a certain celebrity by virtue of important discoveries and personality. These celebrity-scientists must share their scientific work with the community, but they are also asked to share views on philosophy and religion. Two of the most visible celebrity-scientists from the last century are Albert Einstein and Carl Sagan, and both spoke at length on the way science shaped their religious views. Both came from Jewish families but eventually abandoned traditional organized religion. Einstein discovered the special and general theory of relativity, the mass-energy equivalence, the quantization of light, and more. His contributions to physics unified mechanics and electromagnetic fields and helped lay the foundation for quantum theory. After coming to America in 1933, he achieved the celebrity status that allowed him to share his thoughts outside of science. He advocated for a “cosmic religion” that went beyond traditional world religions of fear and of morality. Einstein suggested that the desire to “experience the universe as a single significant whole” was at the root of cosmic religious feeling. He rejected the anthropomorphic God of the Judeo-Christian tradition in favor of an impersonal one. Einstein claimed that cosmic religion belonged to science and art not an organized church or doctrinal system. Carl Sagan came to prominence a couple decades after Einstein’s death in 1955. An influential astrophysicist, Sagan discovered the high temperatures of Venus’ surface and predicted the presence of liquids on certain moons of Saturn and Jupiter. His fame also

stemmed from his work hypothesizing about the potential of extra-terrestrial life and his work as a science popularizer. Sagan built off Einstein's idea of a "cosmic religion." He suggested that science was the bulk of true religious activity. He felt the desire to see the universe as a whole that Einstein described. Denouncing most organized religions as bastions of pseudoscience, Sagan promoted and pushed cosmic religion more than Einstein ever had. This paper looks at the interplay of physics and religious philosophy by looking at the "cosmic religion" proposed by Einstein and built upon by Sagan.