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Status of GENETIS

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GENETIS aims to use AI to find optimal designs of instruments for greater science outcomes. Initially, we are using genetic algorithms to evolve optimal antenna designs for the detection of astrophysical neutrinos and is building a prototype of what is the first antenna evolved for a science outcome. The Nebulous spin-off project is building antenna designs from building blocks "LEGO"-style rather than evolving parameters of a preconceived design. Since the previous MODE workshop, GENETIS and Nebulous have grown and strengthened in the areas of AI, engineering, computer science, astrophysics, and connections to industry. I will review GENETIS and Nebulous results to date, outcomes of a Blue Sky Studies workshop to be held at JPL in August, and plans for the future.

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