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# Hyper-Fast Positive Energy Warp Drives

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Solitons in space–time capable of transporting time-like observers at superluminal speeds have long been tied to violations of the weak, strong, and dominant energy conditions of general relativity. This talk presents an approach to identify soliton solutions capable of superluminal travel that are sourced by purely positive energy densities. This is the first example of hyper-fast solitons satisfying the weak energy condition, reopening the discussion of superluminal mechanisms rooted in conventional physics. Remaining challenges to autonomous superluminal travel are also discussed, such as the dominant energy condition, horizons, and the identification of a creation mechanism.

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