Halos and undecidability of tensor stable positive maps

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A map is tensor stable positive (tsp) if all its tensor powers are positive, and essential tsp if it is not completely (co)-positive. Are there essential tsp maps? We prove existence of essential tsp maps on the hypercomplex numbers. We also prove undecidability of tsp on the matrix multiplication tensor, and conjecture that tsp is undecidable. Proving this conjecture would imply existence of essential tsp maps, which has an important implication in quantum information theory, as it would imply existence of NPT bound entangled quantum states.