Abstract Submitted
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A planet orbiting inside of a star. ALEXANDER PANIN, Utah Valley State College — Most of stars pass via the state of red giant during their evolution partially engulfing their planetary systems. We investigate theoretically and computationally how a planet moves inside of such star and how quickly it heats up. Surprisingly, our modeling shows that a planet does not quickly disintegrate inside of a red giant star nor does it even change its orbit quickly – in some cases a planet continues to orbit below a photosphere of a red giant star for thousands of years, and in some other cases - for millions of years (!).

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