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*Local uniqueness of the slowly oscillating
periodic solutions of the Wright's equation*

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Abstract

Slowly oscillating periodic solutions (SOPS) of the parameter dependent Wright's equation have been extensively studied since the late 50's. An open conjecture states that for every parameter value $\alpha > \pi/2$, the Wright's equation has a unique SOPS. In 1991, Xie proved that the result holds for every $\alpha > 5.67$. In this talk, we introduce a new theorem regarding local uniqueness of SOPS along the branche bifurcating from 0 at $\alpha = \pi/2$. The proof of the theorem is based on a rigorous continuation method performed on a infinite dimensional problem.