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An Equivalent Problem to the Collatz Conjecture

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In this talk, we give two recurrence sequences of integers, defined by recurrence relations of the form $V_{n+1} = f(V_n; T_n)$ and $T_{n+1} = g(V_n; T_n)$, which are related to the Collatz conjecture. We show why if we can prove that $\lim_{n\to+\infty} V_n = 0.$ for all the values $(V_0; T_0)$ that means Collatz's conjecture proof. We also try to understand why the Collatz conjecture is a difficult problem.

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References

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