

STABILITY OF SINGULAR LIMIT CYCLES FOR ABEL EQUATIONS REVISITED

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We obtain a criterium to determine the semi-stability of the singular closed solutions of the Abel equation $x' = A(t)x^3 + B(t)x^2$, where A, B are polynomial or trigonometric polynomials with certain conditions. The criterium allows to obtain upper bounds on the number of limit cycles for certain families.

Joint work with: M. Fernández and I. Ojeda.