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FORCE-FREE DUFFING-VAN DER POL OSCILLATOR

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There are many nonlinear oscillator systems arising from engineering and physical phenomena, such as the Helmholtz oscillator, the Duffing oscillator, and the Duffing-van der Pol oscillator etc. Quite a few effective approaches have been proposed to handle these oscillators in the literature. In this talk, we study the force-free Duffing-van der oscillator by using the modified Prolle–Singer method. Numerical simulations are also illustrated which are in agreement well with our theoretical analysis.

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