Novel Method for Control of non linear system based on Negative Acceleration

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***Abstract*— In this paper, a novel method of control of non linear system is presented. The new concept describes a method to obtain a stabilized control of non linear system. This method shows that by imposing a negative value for the system acceleration, this will give control which stabilizes a nonlinear system. The new proposed control is realized by positive feedback of acceleration with the integral action on this acceleration. Two examples are used to illustrate the effectiveness of the obtained methods.**

***Keywords*—Control of nonlinear systems, stability of nonlinear systems, stabilization of systems.**

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