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ON THE GLOBAL ASYMPTOTIC STABILITY OF DIFFERENCE EQUATIONS SATISFYING A MARKUS–YAMABE CONDITION

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Abstract: We prove a global asymptotic stability result for maps coming from n-th order difference equation and satisfying a Markus–Yamabe type condition. We also show that this result is sharp.

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Key words: Global asymptotic stability, Lyapunov function, difference equation, Markus–Yamabe problems.