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Qi Han* (qhan@tamusa.edu), Assistant Professor, Department of Mathematics, Texas A&M University at San Antonio, San Antonio, TX 78224. *Positive ground states for nonlinear static Schrödinger equations that have potentials vanishing at infinity.*

We consider the existence of positive ground states for the nonlinear Schrödinger elliptic equations

$$-\Delta u + V(x)u = K(x)g(u) \tag{1}$$

that have potentials $V(x), K(x) \geq 0$ both vanishing at infinity in a measure-theoretical sense when $N \geq 3$. (Received September 16, 2017)