=

$$E = \frac{\sqrt{\quad + \quad} \; -}{-} - \quad = - \quad -$$

2.2.1. S a ial Sing la i y of

$$\overline{P}(p)A(p) = \frac{1}{\sqrt{2}}(p^2 + a^2)^{-1/2}\left(1 + \frac{a}{\sqrt{p^2 + a^2}}\right)^{-1/2} = \frac{1}{a\sqrt{2}}u(1 + u)^{-1/2}, \tag{77}$$

where $a = mc$ and

$$u = \frac{a}{\sqrt{p^2 + a^2}} = \frac{1}{\sqrt{\frac{p^2}{a^2} + 1}} \leq 1. \tag{78}$$

Expanding into series at $u = 0$

a finite resolution then either the physics or numerics define a finest length scale (δx) and we can pick $\tau_{max} \gg \delta x^{-2}$

3.3. A lica ion

Finally, the expansions were tested for various hydrogen-like sys-

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