

Abstract Submitted  
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**The Effective Kahler Potential, Metastable Vacua and R-Symmetry Breaking in O’Raifeartaigh Models**<sup>1</sup> BEN KAIN, SHERMANE BENJAMIN, CHRISTOPHER FREUND, Rowan University — Much has been learned about metastable vacua and R-symmetry breaking in O’Raifeartaigh models. Such work has largely been done from the perspective of the superpotential and by including Coleman-Weinberg corrections to the scalar potential. Instead, we consider these ideas from the perspective of the one loop effective Kähler potential. We translate known ideas to this framework and then construct convenient formulas for computing individual terms in the expanded effective Kähler potential. We do so for arbitrary R-charge assignments and allow for small R-symmetry violating terms so that both spontaneous and explicit R-symmetry breaking is included in our analysis.

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