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# The O(N) model at large charge and the quartic/cubic equivalence

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The large-charge expansion can be employed to find and test dualities in QFT. I illustrate this point by investigating the quartic O(N) model between four and six dimensions, where it develops a metastable UV fixed point that is believed to be equivalent to the IR fixed point of an O(N) model featuring cubic interactions. By focusing on the cubic model just below six dimensions, I show how large-charge methods allow matching an infinite series of terms between the two descriptions, reinforcing the conjectured equivalence. Next, I analyze the stability of the large-charge sector of the two models by discussing the onset of complex CFT dynamics above a critical value of the charge.

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