"Cardy formula for higher dimensional CFT from EFT"

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Abstract: I'll start by reviewing recent proposals for a Cardy-like formula in 4d and 6d superconformal field theories that governs the universal behavior of the supersymmetric partition function in a high temperature limit. In the special case when the partition function corresponds to the superconformal index, the Cardy formula encodes the high energy asymptotics of the spectrum of supersymmetric operators in the CFT. For theories with a moduli space of vacua, I'll describe how such formula can be proven using the effective field theory on the moduli space. I'll also comment on this result in relation to matching certain global anomalies of the CFT in the EFT.