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**Infrared finite observables in  $\mathcal{N} = 8$  supergravity.** (English. Russian original) Zbl 1228.83111  
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Summary: Using the algorithm of constructing the IR finite observables discussed in detail in our earlier papers, we study the construction of such observables in  $\mathcal{N} = 8$  supergravity in the first nontrivial order of perturbation theory. In general, contrary to the amplitudes defined in the presence of some IR regulator, such observables do not reveal any “simple” structure.

**MSC:**

**83E50** Supergravity

**81T60** Supersymmetric field theories in quantum mechanics

**Full Text:** [DOI](#) [arXiv](#)

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