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Abstract for an Invited Paper for the SES11 Meeting of the American Physical Society

## Recent developments in four-dimensional supergravity

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I will summarize recent work on gauge theories in supergravity, specifically concerning the 'Fayet-Iliopoulos' parameter. In rigidly supersymmetric gauge theories, this parameter also appears and can vary continuously. In supergravity old lore held that it should always vanish. I will discuss recent developments showing that in fact it can be nonzero, but is quantized, and will explore various ramifications of that result.