



Like charges repel, but what if it's all balls?

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ABSTRACT: The dianion of the $(C_{59}N)_2$ azafullerene dimer has been studied by computational chemistry. An apparent dilemma is critically addressed: Recent experiments reported the second electron affinity of $(C_{59}N)_2$ despite the current believe that Coulomb repulsion exceeds by far the bond strength between the two spheres, leading to the proposal of a metastable dianion. The computational work shows that $(C_{59}N)_2^{2-}$ is in fact a perfectly stable species, confirming experiments that lead to the dissociation-free formation of this dianion.