## $1+2+3+. .=-1 / 12$

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#### Abstract

I will explain in what mathematical sense we can claim that the sum of all natural numbers is equal to $-1 / 12$. Along the way, we will touch on topics such as the Euler Gamma function, analytic continuation and the Riemann Zeta function. I will also explain how this relates to my research in modular forms and theoretical physics.


