Title: $1+2+3+4+\ldots=-1 / 12$

## Chrisoph Keller

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.

