Title: 1+2+3+4+...=-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.