Abstract. The *indecisive infinite sum*

$$\sum_{n=1}^{\infty}(-1)^{n-1} = 1 - 1 + 1 - 1 + 1 - 1 + \dots$$

does not converge in the usual sense from Calculus to anything at all... Nevertheless, we will see that in a certain *averaging sense*, called *Cesàro convergence*, the *sequence of partial sums* of the above series $(S_N)_{N\in\mathbb{N}} = (1,0,1,0,1,0,1,0,\dots)$ does converge: **to** $\frac{1}{2}$ **.**

What about *infinite sums* that are even more indecisive than $\sum_{n=1}^{\infty}(-1)^{n-1}$:

$$\sum_{n=1}^{\infty}(-1)^{n-1}n \ , \quad \sum_{n=0}^{\infty}(-1)^{n}2^{n} \ , \quad \text{or even} \quad \sum_{n=0}^{\infty}(-1)^{n}n! \quad \text{... ?}$$

These series fail to converge in a spectacular fashion, since their partial sums are *unbounded* and *oscillatory*. Yet we will see that we can still *persuade* them to *converge* using other methods, including those of *Borel*.