

## A SHORT PROOF OF THE RIEMANN HYPOTHESIS

ABSTRACT. I dispose of the Riemann hypothesis in a few lines. I also have an amazing offer just for you on a bridge in New York.

*First Version.* Consider the statement  $S$ .

*If this statement is true, then so is the Riemann hypothesis.* (S)

Is the statement true? Well, if it is true, then so is the Riemann hypothesis. But that's exactly what the statement says. So,  $S$  is true and hence the Riemann hypothesis holds.  $\square$

You're not convinced! Let's rephrase the argument.

*Second Version.* Suppose the statement is false. So, we're saying  $A$  is false in a statement of the form *If A, then B*. This means the conditional statement is true. So, if  $S$  is false, then it's true. Nonsense! Therefore  $S$  is true. Again, the Riemann hypothesis holds.  $\square$

Now, let me tell you about that bridge. . . .