

Navier–Stokes: The Economics of a \$6.5M Proof

Generation took about 105 hours. Independent acceptance may take years.

GENERATED BY AI AGENTS

≈105 hours

88 h proof search + 17 h Lean formalization/verification
≈10,000 concurrent agents · 130B output tokens
\$6.5M list-price equivalent, output tokens only

INDEPENDENTLY ACCEPTED

Years

Publication in a qualifying journal
At least 2 years of scrutiny
General acceptance by the mathematics community

AI can generate research faster than qualified humans can evaluate it.

Token prices may fall. Independent validation may not.

Sources: OpenAI Navier–Stokes announcement; Clay Mathematics Institute Millennium Prize rules. The \$6.5M figure is an output-only list-price equivalent, not OpenAI's actual cost.