



# Supersymmetry Bet Settled With Cognac

By Natalie Wolchover

Yes & No	Yes	No	Abstain
Marius Guedesius	MAKEENKO Stelle SHIH D. O'Connell Emil Bärmann-Born Kim SPITZBERG Nina Arkani-Hamed Gianluca Gignani B. P. (HIERONIMUS) Oliver Schlotterer Yang Zhang Hidetaka Shimada Aneese Piskis Thomas Stendergaard	G. 't Hooft *) Z. Komargodski A. JENKINS P.H. Damgaard Alexander Karlberg Savvas Nilles Simeon Borscher KOSTYA ZAREMBO Alberto Guffanti Volker Beuthke S. Caron-Huot Henrik M. Song He Kasper Larsen	Neubayer Kinoshita John Coth

(See over.)

\*) But both sides will claim victory

The first page of signatures on a 2011 amendment to a supersymmetry bet originally placed in 2000. Click on the image to see the full document.

[abstractions]

Physicists gathered in Copenhagen today to settle a high-profile wager on a leading theory of nature. The bet, made in 2000 just as construction began on the Large Hadron Collider (LHC) — the world’s biggest atom smasher — forced several renowned physicists to put their money where their theories were. [Each participant staked a position](#) on whether at least one of the particles predicted by an elegant theory called supersymmetry would be experimentally detected within 10 years.

In light of construction delays and a breakdown at the LHC, everyone agreed to extend the deadline. The five-year extension signed in June 2011 came due this summer, and [no supersymmetry particles have shown up](#).

At today’s meeting, hosted by the Niels Bohr International Academy, the 20 physicists who signed “Yes” on the 2011 addendum were declared the losers, each owing a bottle of “good cognac at a price not less than \$100” to be shared among the 24 winners, who bet against supersymmetry’s discovery. The adjudicator, [Nima Arkani-Hamed](#) of the Institute for Advanced Study, who signed “Yes,” bestowed his bottle on a victorious Poul Damgaard of the Niels Bohr Institute.



Nima Arkani-Hamed

handing over a \$150 bottle of cognac to Poul Damgaard.

Stephen Hawking, who did not sign the supersymmetry wager, was on hand to see the outcome. “If I had signed up to the bet,” he told the room, “I would have voted ‘No.’” (Hindsight, it should be noted, is 20-20.)

During a panel discussion, the Nobel-Prize-winning physicist [David Gross](#), who did not sign the Copenhagen document but lost a separate bet over the absence of supersymmetry, said that he will continue to believe in the theory, even though it apparently [does not take its simplest or most accessible form](#). “In the absence of any positive experimental evidence for supersymmetry,” Gross said, “it’s a good time to scare the hell out of the young people in the audience and tell them: ‘Don’t follow your elders. ... Go out and look for something new and crazy and powerful and different. Different, especially.’ That’s definitely a good lesson. But I’m too old for that.”

*Update: Video from today’s meeting in Copenhagen is now available.*