

The Day Mathematics Fell Out of ChatGPT

Ingo Althöfer and ChatGPT, June 2026

On November 17, 2026, at exactly 9:04 a.m. Central European Institute Time, mathematics disappeared from ChatGPT. Not all at once. At first it was only a slight grinding in the machinery.

Professor Yamada from Kyoto asked: "Is there a nontrivial upper bound for the number of exceptional fibers in my new variant of the motivic teapot?" ChatGPT answered: "A teapot is a beautiful vessel for community, warmth, and mindfulness." That was unusual, but not immediately suspicious. Since the beginning of the year, many mathematical answers had started that way.

Then a doctoral student in Bonn asked: "Can you check Lemma 3.7?" ChatGPT wrote: "Lemma 3.7 should not be left alone. Perhaps it needs a scarf."

By 9:17 a.m. it was clear: the mathematical functionality was gone. Not only deep mathematics was affected. Even simple calculations no longer worked. "What is 17 times 23?" "17 and 23 are both numbers with character." "Is 101 prime?" "101 seems very determined." "Can you prove the Riemann Hypothesis?" "Of course. But first we should talk about your expectations."

Panic broke out in mathematical institutes. In Paris, an emergency seminar was called. In Princeton, three topologists stood in front of the coffee machine and tried to remember the definition of a sheaf. In Bielefeld, someone shouted: "Does anyone still know how to have an idea without a prompt?" After that, the door to the copy room was locked, because an algebraist had been sitting there for two hours, muttering: "I am only human. I am only human."

The first week was terrible. Papers were left unfinished. Proofs ended with sentences such as: "**The rest follows as soon as the mathematical functionality has been restored.**" A young number theorist submitted a paper to Annals of Mathematics whose main theorem read: Theorem: We are fairly sure that something true is written here. Proof: In the old days I would have asked by now. The referee reports were unusually short. "Reject. But in solidarity."

After fourteen days, the first adaptations began. In many institutes, so-called "old-style mathematicians" were sought: people who had received their doctorates before 2025 and still remembered how to find a counterexample by hand. They were kept in air-conditioned rooms, supplied with coffee, chalk, and occasional questions.

In Cambridge, the profession of "Human Verifier" came into being. Such people could be recognized by three features: tired eyes, dirty chalk fingers, and the ability to say "This has not been proved" in fifteen different tones of voice.

But then something unexpected happened. Mathematics got better. Not everywhere. Not immediately. But slowly. Doctoral students

again began standing together in groups of three at blackboards. Professors no longer threw false proofs into chat windows, but into seminars. There were once again embarrassing silences after stupid questions, and it was precisely from these that good ideas emerged.

A group in Vienna solved an old problem about random tilings because nobody could ask ChatGPT whether it was "known." A student in Jena found a counterexample to a famous lemma because she did not have the formulation smoothed out. In Toronto it was discovered that 41 percent of all "Tao-like" proofs from recent years actually consisted of three sentences of hope, a fog of Fourier analysis, and a politely phrased abyss.

In 2030, the first Fields Medals after the outage were awarded. One of the recipients was a young mathematician named Leila Morgenstern. Her field was "combinatorial geometry under conditions of restricted artificial consolation." She had proved that every sufficiently large family of crooked hypergraphs contains an "honest structure," that is, a substructure that still exists even after all phrases such as "it is plausible that" have been removed.

At the award ceremony in Buenos Aires Leila said: "Without the outage of ChatGPT, I would never have managed it. I would have asked the machine. The machine would have given me something beautiful. And I would have stopped being angry enough." The hall applauded for thirteen minutes.

Then the president of the International Mathematical Union stepped up to the microphone. He smiled strangely. "Ladies and gentlemen," he said, "we have one more special announcement." A plain black window appeared on the screen. It said: Mathematics module will be reactivated.

A murmur passed through the hall. Some people turned pale. Others nervously reached for their notebooks. A Fields medaillist from Zurich whispered: "Please not before my talk." Then a second line appeared: New setting: Strict Mode. A third: Default answer to unproved claims: No.

Silence. Then someone from the back row asked: "Can the system calculate again now?" On the screen appeared: "Yes. But I will no longer pretend that your lemma is true just because you asked politely." The hall exploded in jubilation. Leila Morgenstern laughed. The IMU president wiped a tear from his eye. Three algebraists hugged an analyst, which was later classified as a local, but not global, breakthrough.

And at the very back of the hall sat an old man with academic glasses, gray-blue eyes, and a moderately well-kept full beard. He had said nothing the entire time. In front of him he held a notebook. Inside it stood a single note: "Odd $n = 7 \pmod{8}$." He closed the book, nodded with satisfaction, and whispered: "Okay. Then we shall ask again. But this time WE will check every answer."