

# My favorite theorems

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One of the recurring themes of this blog will be descriptions of my favorite theorems of the 21st century. I will begin with a special category, *Between the Centuries*, devoted to theorems that were proved in the late 20th century but published in the early 21st century. After that, I will proceed year by year—starting with 2001, then 2002, and so on.

For each year, I will select my favorite theorem in the following subject areas:

- Number Theory
- Combinatorics
- Analysis
- Algebra
- Geometry and Topology
- Probability and Statistics
- Algorithms and Complexity

In addition, I will choose a single *favorite theorem of the year* across all of mathematics.

This post will serve as a central index for the series, collecting links to all of my selected theorems in one place as the project develops.

## Between the Centuries

Number Theory: [The Modularity Theorem](#)

Combinatorics: [Cycle decompositions of complete graphs](#)

Analysis: [On the zero set of linear recurrences](#)

Algebra: [All braid groups are linear](#)

Geometry and Topology: [The proof of Kepler's conjecture](#)