Symmetry appears everywhere in mathematics and science, from algebra to snowflakes to particle physics. The branch of mathematics dealing with symmetries is called Group Theory. For example, group theory can be used to prove that there are essentially only 17 possible wallpapers. In higher dimensions, symmetries become more and more intricate. But how many possible symmetries are there? Can we somehow describe all of them? One of the most remarkable achievements in mathematics of the 20th century was the completion of the proof of a theorem known as the "Classification Theorem". It describes the all the finite simple groups, which are the "atoms" of symmetries. It took 100 mathematicians over 50 years to complete it and the 10,000 pages result is the longest proof in mathematics to date. In this talk an account of this exciting story will be given, including some basic notions of group theory. No prior knowledge of groups is required.

Snacks and drinks served!

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