# A Proof Of George Andrews' and David Robbins' q-TSPP Conjecture

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About a year-and-a-half ago, Manuel Kauers, Christoph Koutschan, and I gave a beautiful semi-rigorous proof of the famous q-TSPP conjecture that failed to impress

anyone. We realized that mathematicians do not care about "truth", they only care about that artificial art-form called "rigorous proof". In order to humor them, we (or rather Christoph Koutschan) worked very hard to turn this semi-rigorous proof into a fully rigorous proof. This was a true computational tour-de-force on his part, requiring brilliant human insight, and lots of sneaky tricks, to tame the computer to reduce a computation, that on the face of it, looked like it would take fifty years on a future computer, to a computation that only took a couple of weeks on a medium-size contemporary computer. It is a real breakthrough, if we say so ourselves, not only in combinatorics, but also in symbolic computation, and a great victory of my beloved holonomic ansatz.

## Very Important

This article is accompanied by <u>supporting</u> <u>software and data</u>.

Added Jan. 25, 2011: This was <u>written up</u> in the Austrian <u>media</u>.

ajouté Fév. 4, 2011: <u>en français</u> (par Maurice Mashaal, rédacteur en chef de Pour la Science).

Added March 2, 2011: We are also famous in Switzerland! Read <u>George Szpiro's</u> wonderful article (that its global and universal truths make-up for some local inaccuracies, see my <u>Email message to</u> <u>Christoph Koutschan and Manuel Kauers</u>).

Added March 8, 2011: Read <u>Tony Philips's</u> take on math-in-the-media and <u>Allyn</u>

#### Jackson's summary.

# Added Nov. 2015: This article was the <u>David</u> P. Robbins prize of the American Mathematical Society

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