
A Letter from the Editor: Jonathan M. Borwein (1951–2016)

Scott T. Chapman



Jonathan M. Borwein

August 2, 2016 was a difficult day for us at the Monthly, as we learned of the untimely death of Monthly Associate Editor Jonathan Borwein. Many of you knew Jon as an internationally acclaimed mathematician. One of the world's leading scholars in Experimental Mathematics, his long publication list spanned the breadth of pure and applied mathematics. Cited over 22,000 times (according to Google Scholar), Jon was perhaps the world's leading authority on the study of π . He co-edited the highly cited *Pi: A Source Book* [3] which was followed up earlier this year with a companion volume *Pi: The Next Generation* [2]. In 1993 when the writers of the TV cartoon *The Simpsons* wanted the 40,000th digit of π to use in one of their episodes, Jon was happy to supply it to them (by the way, it is 1) [23].

Jon's imprint on mathematics will not solely be his often ground breaking publications nor his impressive research output. Jon was one of those rare scholars with the ability to not only produce mathematics at an extremely high level, but also to communicate it to widely diverse groups. In 1993, his co-authored Monthly paper "Ramanujan, Modular Equations, and Approximations to Pi, or, How to Compute One Billion Digits of Pi," [6] was awarded the Chauvenet Prize, the MAA's highest award for a noteworthy expository or survey paper. In recent years, he wrote widely to general audiences about mathematics for *The Huffington Post*. His annual Pi Day talks at his home institution of The University of Newcastle in Australia, have become the stuff of legend (one of these talks can be found at [1]).

My purpose here is not to survey Jon's research career - there will be better and more thorough reviews of this at a later date. I wish today to honor his important and extensive contributions to the pages of the Monthly. I do not think that a list has been compiled of authors who most frequently published in the Monthly, but if it had, then Jon's 22 papers have to be near the top of the list (his papers are listed in the references by order of appearance [4]–[25]). You will note that his Monthly papers deal with a wide variety of topics, from his favorite subjects (like π and experimental mathematics), to core subjects in mathematics (series, integration, and the zeta function). Even this list may not do his contributions to the Monthly justice; space does not allow us to review his slew of both submitted and solved problems in our Problem Section.

One of my first acts as Editor of the Monthly, was to appoint Jon to our Editorial Board. I will never forget his first review of a paper for me - it consisted of 4 words: "This paper is ghastly." I think this line says a lot about Jon. While I have probably

never known anyone that loved mathematics as much as he did, he also had a keen eye for good mathematics. I think that some of the best papers that were published during my term were handled by Jon.

In June I spent a week with Jon when he was at Western Ontario University as a Visiting Distinguished Scholar. During that week, we began work on a project to expand [25] into a *Carus Monograph*. I hope someday to be able to finish this project, but the end result will never be what it would have been with Jon's further input. It is hard for the Monthly to say goodbye to Jonathan Borwein. He was a great Associate Editor, a great contributor to our pages, and one of the best friends the Monthly ever had. The legacy he has left us in the pages of the Monthly will benefit the students and admirers of mathematics for many years to come.

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