

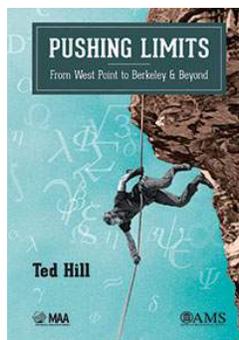
Book Reviews

Pushing Limits: From West Point to Berkeley & Beyond

By Ted Hill. A co-publication of the AMS and Mathematical Association of America

“Pushing limits: The Indiana Jones of Mathematics”. In the faraway year of 1985 I was a young physicist with a summer job at CERN when advance copies of Richard Feynman’s autobiography Surely you’re joking, Mr. Feynman! were received in the library. I immediately grabbed and, since it could not be borrowed, spent the whole night in the library and read it in one sitting. The at times exhilarating, at times hilarious, but always inspiring genius of Feynman pored through his adventures of a curious character.

Thirty years later, Ted Hill’s *Pushing limits: from West Point to Berkeley and beyond* conveys the exact same sense of exaltation. Ted is a world-class mathematician—and, like Feynman’s, his tales are almost unbelievable. If you open this book expect some kind academic or scientific autobiography, you are in for big surprises: the whole book reads like an Indiana Jones movie, packed with hard-to-believe adventures of an academic set loose in the world.



Ted has lived an incredibly rich life. The first chapter finds him as a cadet in West Point, and we quickly understand why. In a strict military school, his rebellious and resourceful nature start to show and he is already pushing the limits as they are imposed on him (and duly pays for it!). After a period at Stanford, Hill serves in the Vietnam war. His adventures there range from the dramatic to the hilarious (he even stole an Army jeep!). Upon being discharged from the Army he went on to Berkeley graduate school and tackled one of the toughest maths programs in the world at the heyday of Dubins and Smale—without a degree in Mathematics.

Talk about self-confidence!

After his Ph.D. (which for a short time was a Ph. C., putting his career in jeopardy— you have to read the book), Hill landed a tenure-track job at Georgia Tech, where he managed a dream situation for a research mathematician: a job with one year leave of absence every two years (the leave was unpaid, but Ted Hill was “always frugal” and lived very happily with that).

And so Ted Hill managed to spend most of his life honing his parallel passions: doing mathematics and globetrotting the world. His many adventures are recounted like fireside tales: his naïve quest for gold in the Peruvian Andes, a two-month travel in a hippie VW camper deep into Soviet Russia at the height of the Cold War, camping out in Idi Amin Dada’s Uganda or in no-man’s-land between Tanzania and Zambia, swimming with sharks in the Bahamas, stealing a canoe at Berkeley, upside-down rappelling or getting caught on foot inside a tunnel when a train approaches at full speed. Twice. Move over, Indiana Jones! The mathematical side takes second stage; but all mathematicians can relate to the Eureka! moments appearing after chapter 10, or the several instances of the appearance of Benford’s law, which in the late 1990s came to public attention as the basis of a IRS fraud- detecting scheme.

The final part the book proceeds into an unexpected pathos as it delves into a dark side of academia. Ted Hill discovered administrative wrongdoing at the highest level at Georgia Tech. His long and unnerving years-long fight after whistleblowing ended, sadly, with his own demise from Georgia Tech.

Then again, this was Ted Hill at his best: the courage to push the limits and to affront the powers that be, be they the laws of physics or the laws of men, coupled with an impeccable and unwavering sense of ethics. When asked “How do you keep from getting stuck in one groove and following a dull trail?” he answers: “I let my curiosity lead the way, just like on a new hike or dive.” The question was about maths, but in fact it sums up Ted’s attitude towards life.

Pushing limits.

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