

Launching a dream and a life

By Wendy Lichtman

Even though I have no particular interest in astrophysics, I spent an afternoon last month listening to a lecture about quasars, thermonuclear activity, and supernovae. Even though it was the weekend before I was leaving town to go to my son's college graduation, and I had plenty to do to get ready for my trip, still I sat in a darkened auditorium in the physics building on the Berkeley campus. I was watching a PowerPoint presentation about Chandra, the X-ray telescope that's orbiting the Earth.

I did all this because Harvey Tananbaum, the scientist who had come from the Smithsonian Astrophysical Observatory to give the lecture, is my cousin.

Harvey owes me one, I thought, as I glanced around the room at the other people, most of whom were taking notes and looking as if they had previous knowledge of rocket science.

"If you ever get the opportunity to be present at the launching of a rocket, don't miss it," Harvey told the audience. "It's one of the most thrilling experiences life has to offer."

"Yeah, right," I thought, as I took out my own notepaper. "Material for quilt," I wrote, thinking about the graduation gift that I've promised my son I'll finish before he leaves for London in the fall.

It's Chandra's job to send back information about what's hidden inside black holes, and the screen in the front of the room was filling with remarkable images: blazing red and yellow swirls, hot white circles rimmed by purple flames. "How about those shades for the quilt?" I wondered, thinking about my son's love of bright colors.

Sitting back, I pictured him graduating from middle school. His hair was dyed orange that day, his shirt was pink, and when he smiled at me, I could see the red bands he'd asked the orthodontist to put on his braces.

I didn't get anything else written on my notepaper, though, because my cousin's lecture kept distracting me. Harvey's an engaging speaker. When he talks about X-rays bouncing off the mirrors in the telescope like pebbles skipping off water, he swings one arm back, bends his knees, and pitches an imaginary pebble as if he were standing on the shore looking out over the sea. When he describes the rocket about to launch, his arms are above his head, and they are trembling with power.

Also, I know some of the history of this project. I remember sitting with Harvey at another cousin's wedding 25 years ago and asking him to tell me, in a way I could picture, what it was he wanted to do.

"OK," Harvey had said, "picture this: a telescope that's delicate enough to have exquisite precision and strong enough to orbit the earth."

Since then I've heard about some of the pressures - scientific, financial, and emotional - that Harvey's had to face as he turned his idea into reality. I remember, for example, being at his home in Boston before the launch last year, when Harvey got a phone call from NASA.

A worker on the space shuttle had heard a piece of metal drop - maybe it was a screw, maybe it was a ball bearing. Whatever it was, they were searching throughout the shuttle with a magnet, and until they found what had clunked, there would be no launch.

The last thing we saw on the screen was a film of when the rocket carrying Chandra finally did take off. Harvey's wife was sitting next to me, and she whispered that, in addition to the excitement Harvey felt when he saw the project he'd been working on for a quarter of a century leave the earth's atmosphere, he also felt some loss. "I'll never see it again," he'd told her.

I was, I suppose, the only one sitting in the darkened auditorium of the physics building on the University of California at Berkeley campus who was crying that afternoon. But maybe not. Maybe other parents were also thinking about their children - how we put our hearts and minds into raising them for a couple of decades and how, if we do our job successfully, they take off; how, for so many years, we get to see them daily and how, for many more years, we don't.

My son wore a bright purple tie under his black graduation robe the following weekend, and as the processional passed where we sat, he smiled at us, raising an arm to his father, sister, and me.

At that moment I believe I understood something about what it means to watch a launch. And I have to agree with my cousin: It's one of the most thrilling experiences life has to offer.

(c) Copyright 2001. The Christian Science Monitor

