C. C. Lin at MIT: From a Student's Perspective

by Fred Browand

I was a grad student in the Department of Aeronautics and Aeronautics, MIT, in the early 1960s. My interest was aerodynamics and, more broadly, fluid mechanics. At that time C.C. Lin was the head of the Applied Math Program. Applied Math has always been heavily invested in fluid mechanics, and especially so at MIT. (Lin's thesis at Caltech had placed the problem of laminar boundary layer instability on a solid mathematical footing—in spite of earlier work by W. Tollmien and W. Heisenberg.) Lin taught a graduate course in fluid mechanics in the Math Department. It was very popular with engineering students of all disciplines, and the course was always full. I took Lin's course and I can still remember the experience. Lin would arrive precisely at the appointed time, and always impeccably dressed—suit and tie, of course, but always with color-matched suit and tie, suit neatly pressed, shoes shined, etc. I can't remember his ever bringing a notebook or other written material with him. He would begin speaking and as he spoke he would also write—beginning at the upper left-hand corner of the board. At the end of class the boards would be (mostly) covered, and I would have gotten not only his insightful spoken lecture, but also a marvelous written record. I never remember him erasing or adding/changing anything once it was written. How could he be so precise, so organized, week after week—it was truly remarkable. On occasion Lin would be absent, and his place was usually taken by a youngish Lou Howard who was also an excellent teacher, and has gone on to make many notable contributions in hydrodynamic stability and other areas of applied mathematics.

Judging C.C. Lin's contribution to MIT and to teaching must include his mentoring for the other (mostly young) faculty he assembled into the Applied Math Program. I remember a number of them, from various courses I took. They included Dave Benney, Harvey Greenspan, Lou Howard, and Alar Toomre. What an exceptional group!

I enjoyed applied mathematics, but I had no aptitude for it. I distinctly remember once thinking during a Harvey Greenspan class, that if I became an applied mathematician, I would have to compete with these guys! This thought further encouraged me to follow my interest in experimental fluid mechanics.