REMEMBERING BILL-MAHAVIER

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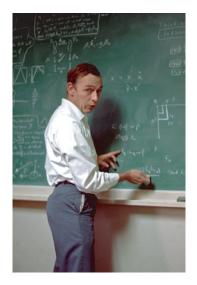*ingram@mst.edu*

circa 1976
photo courtesy of Jack Rogers

• **Bill Mahavier was born July 30, 1930, in Houston, Texas, and died October 8, 2010, in San Leon, Texas, on Galveston Bay having just turned 80 years of age. Bill married Jean Donaldson on September 1, 1953, and they remained happily married for over 57 years. They have two children, Ted and Lee, and two grandchildren.**

• **He grew up in Houston and attended public schools there except for three years spent at Schreiner Institute in Kerrville, TX. He graduated from Houston's Lamar High School in 1947 and enrolled at the University of Texas, earning a bachelor's degree in physics there in 1951. He began taking classes from R. L. Moore as a freshman starting with Analytic Geometry. He entered the graduate program at Texas in 1951 and completed his Ph.D. under R. L. Moore in January, 1957, although he spent one year of this time working in California at a lab in Point Mugu. His dissertation title was "A Theorem on Spirals in the Plane".**

- **His first faculty position was at Illinois Institute of Technology, 1957–1959. He then spent the years 1959–1964 at the University of Tennessee. He moved to Emory in 1964 where he remained a member of the faculty until August, 2009. During the academic year 1973–74 he visited the University of Houston and he visited the University of North Texas for two years, 1978–80.**

circa 1969
photo courtesy of Jack Rogers

circa 1970
photo courtesy of Jack Rogers

The Ph.D. STUDENTS OF BILL MAHAVIER

Bill had eight Ph.D. students and seven "grandstudents" (and counting). His students are:

1. **Philip Bacon, Tennessee, 1964**
2. **Ralph Bennett, Tennessee, 1964**
3. **Mary Russell, Emory, 1969**
4. **James Kropa, Emory, 1971**
5. **Emory Merryman, Sr., Emory, 1971**
6. **Jewell McMorris, Emory, 1973**
7. **Michel Smith, Emory, 1974**
8. **Simon Stricklen, Jr., Emory, 1974**

THE PUBLICATIONS OF BILL MAHAVIER

- **A monograph on inverse limits, in progress (with Ingram)**

- *Concerning cut point spaces of order three*, **Int. J. Math. Math. Sci., (2007) (with D. Daniel)**

- *Inverse limits of upper semi-continuous set valued functions*, **Houston J. Math. 3 (2006) 119–130 (with Ingram)**

- *Interesting dynamics and inverse limits in a family of one-dimensional maps*, **Amer. Math. Monthly 111 (2004), 198–215 (with Ingram)**

- *Inverse limits with subsets of* $[0,1] \times [0,1]$, **Topology Appl. 141 (2004), 225–231**

Ever the teacher:

• *Calculus: The Importance of Precise Notation*, PRIMUS, 18 (2004), 349–360 (with Ted Mahavier)

• *A Moore Method Calculus II Course*, Journal of Inquiry Based Learning in Mathematics, 8 (2008), 33 pages

• *Cantor's diagonalization process and the Baire-Moore Category Theorem*, in revision at the time of his death

• *Discovering the best upper and lower Riemann sums for computing logarithms*, in revision at the time of his death

• **Nearly a dozen unrefereed publications ranging from teaching articles for the Educational Advancement Foundation of Austin, TX, to various complete course notes, to technical reports from his industrial work**

- *Joinable continua–an application of inverse limits*, Bol. Soc. Mat. Mexicana 6 (2000), 235–241

- *Continua with only two topologically different subcontinua*, Topology Appl. 94 (1999), 243–252

- *Embeddings of simple indecomposable continua in the plane*, Topology Proc. 14 (1989), 131–140

- *Dimension raising subsets of mappings onto an arc*, Houston J. Math. 14 (1988), 247–251

- *σ-coherent continua are hereditarily locally connected*, Proc. Amer. Math. Soc. 81 (1981), 129–132 (with M. R. Hagan)

- *Subcontinua of finite unions of dendrites*, Topology Proc. I (1976), 311–319

- *Atomic mappings on irreducible Hausdorff continua*, Fund. Math. 60 (1970), 147–151

- *Arcs in inverse limits on* $[0,1]$ *with only one bonding map*, Proc. Amer. Math. Soc. 21 (1969),587–590

- *Semigroups on chainable and circle-like continua*, Math. Z. 106 (1968), 159–161 (with M. Friedberg)

- *Upper semi-continuous decompositions of irreducible continua*, Fund. Math. 60 (1967), 53–57
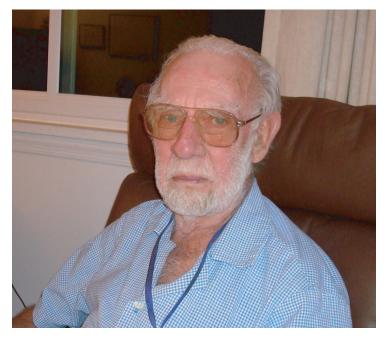
- *A chainable continuum not homeomorphic to an inverse limit on* $[0,1]$ *with only one bonding map*, Proc. Amer. Math. Soc. 18 (1967), 284–286

- *Rates of change and functional relations*, Fund. Math. 48 (1959/60), 265–269

Personal Recollections

- **I first met Bill at the AMS meeting in Athens, GA, in 1964**

- **Bill's part in the continuation of this conference**

- **Bill's health**

- **Visits with Bill and Jean**

- **Bill's love of a good story**

photo courtesy of Jean Mahavier