Primary Sources

- 1. **A Place of Light, The Story of a University Presidency**, Clarence R. Decker and Mary Bell Decker, 1954
- 2. ACM http://amturing.acm.org/award winners/hartmanis 1059260.cfm
- 3. The Denver Post, Apr. 18, 2011 http://www.denverpost.com/breakingnews/ci 17874449
- 4. 50 Years of Texas Caving, Carl E. Kunath, 2007
- 5. Italian Women Past and Present, Maria Castellani, 1939
- 6. Lehigh University http://www.lehigh.edu/engineering/about/alumni/bio beer f.html
- 7. MacTutor History of Mathematics Archive http://www-history.mcs.st-and.ac.uk/history/BiogIndex.html
- 8. MET http://www.nctm.org/resources/content.aspx?id=14279
- 9. NobelPrize.org

http://www.nobelprize.org/nobel prizes/chemistry/laureates/1996/smalley-bio.html

- 10. Professor's Philosophy Steeped in Practicality, Nov. 2, 1962, KC Star p. 6 Charles Hammer
- 11. Rich White Folks: Growing Up Black in America, Robert H. Randolph, 2011
- 12. Phys.org http://phys.org/wire-news/67604035/print.html
- 13. UMKC University Archives http://library.umkc.edu/university-archives

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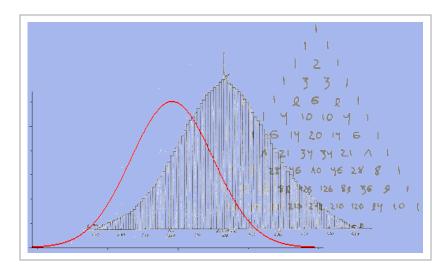
October 2014 For more department history visit: http://d.web.umkc.edu/delawarer/MathDeptHistory.htm

Department of Mathematics and Statistics<u>cas.umkc.edu/mathematics/</u> UMKC, 5100 Rockhill Road, Kansas City, MO 64110



A Historical Dozen

Notable Mathematics Faculty & Students, Colorful Characters 1933-1993



DEPARTMENT OF MATHEMATICS AND STATISTICS

University of Missouri - Kansas City

Roster

William A. Luby Faculty and First Chair 1933-1946	1
Eric Temple Bell Visiting Professor Fall 1942	1
Ferdinand P. Beer Faculty 1943-1944	1
Maria Castellani Faculty 1946-1961	2
Norman N. Royall Jr. Faculty 1947-1975	2
Juris Hartmanis Graduate M.A. 1951	3
Yudell L. Luke Faculty 1955-1957 & 1961-1983	3
Robert H. Randolph Undergraduate B.A. 1959	4
Bennie J. Pearson Faculty 1959-1991	4
Shirley A. Hill Faculty 1963-1993	5
William R. Ward Undergraduate B.S. 1968	5
Mike Keefe Undergraduate B.S. 1973, Graduate M.S. 1974	5

• The University of Kansas City was dedicated on Oct. 1, 1933 (locally "KCU"), and in 1963 became the University of Missouri – Kansas City.

Abbreviations: AAAS = American Association for the Advancement of Science, AAS = American Astronomical Society, KU = University of Kansas, MAA = Mathematical Association of America, MCC = Metropolitan Community Colleges, NCTM=National Council of Teachers of Mathematics

Shirley A. Hill Faculty 1963-1993



1961 Ph.D. Math Education Stanford ● 1964 text "First Course in Mathematical Logic" with P. Suppes ● 1976 chair of the US Commission on Mathematical Instruction

• President NCTM 1978-80 • 1987 UM System Curator's Professor • 1991 MAA Distinguished Service Award • 1992 Harold W. McGraw, Jr. Prize in

Education (\$25,000) • 1994 Mathematics Education Trust Lifetime

Achievement Award (math education reform, rallied public support,
prominent role in An Agenda for Action, and the 1989 NCTM Curriculum
and Evaluation Standards for School Mathematics) [8]

William R. Ward Undergraduate B.S. 1968



After UMKC, 1972 Planetary Sciences Ph.D. CalTech ● Won the **2004 Brouwer Award** from the AAS Division on Dynamical Astronomy ● In 2005 elected a Fellow of the American Geophysical Union and in 2006 a Fellow of the AAAS ● UMKC Alumnus of Distinction 2006 ● Won the **2011 Kuiper Prize in Planetary Sciences** of the

American Astronomical Society as scientist in the Planetary Science Directorate at Southwest Research Institute, for lifetime achievements and pioneering theories on how planets form and evolve; previous recipients include Carl Sagan, James Van Allen & Eugene Shoemaker [12]

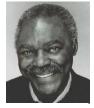
Mike Keefe Undergraduate B.S. 1973, Graduate M.S. 1974



In the 1970s drew his first editorial cartoon for the U-News • 1975, became editorial cartoonist for *The Denver Post* staying 36 years • Appeared in *Time, Newsweek, US News & World Report, The New York Times, USA Today, The Washington Post* and in over 800 world newspapers

The Denver Post • 2011 Pulitzer Prize for Editorial Cartooning citing his "loose, expressive style to send strong, witty messages" [3]

Robert H. Randolph Undergraduate B.A. 1959



Randolph

During his freshman year 1955-1956 there were about 15 Blacks out of 2,400 KCU students ● In 1959, moved to Los Angeles, CA and after 1 ½ years took a computer programming course at LA City College for \$2.50 ● First professional job as a math analyst at Douglas Aircraft Co. & later as programmer in the Apollo Programming Department ● In 1963 went to Seattle, WA to a Boeing

Company task force implementing a key phase of the **Lunar Orbiter Project**, leading to the first maps of the moon's surface in preparation for the 1969 first moon landing • Moved to Digital Equipment Corp.'s Seattle office, where he supplied **Bill Gates** computer instruction manuals to help him better understand interactive computer systems • Promoted to Digital's Senior Management, later to Boston as a Senior Product Manager in its Large Computer Group • In 2011 published a memoir "**Rich White Folks: Growing Up Black in America**" about his life and times in KC, at Lincoln High School, and at KCU in the 40's and 50's • International Computer Industry Analyst and Consultant [11]

Bennie J. Pearson Faculty 1959-1991



KCU Yearbook 1962

Charter 1951 student member of the Texas University Speleological Society • 1955 Ph.D. University of Texas at Austin • 28th student of R. L. Moore (see full MacTutor biography [7]) whose inquiry-based way of

teaching encouraged students to have confidence; well-known

Moore student Mary Ellen

Rudin wrote: "I probably would not be a mathematician had I not worked with Moore" ● Texas, US, and Mexico caving (spelunking) [4] ● Chair 1961-66 ● 5 UMKC Ph.D. students



Fisher's Pit TX 1953

William A. Luby Faculty and First Chair 1933-1946



Johnson County, KS "farm boy" ● M.A., KU 1920 ● Coauthor of successful **high school** "**Hawkes-Luby-Touton**" **Algebra & Geometry texts** 1909-1956 ● KC Polytechnic Institute Head (later Junior College of KC; now the MCC), then KCU department Chair ● MAA MO section chair 1927-1929 ● Taught Astronomy, wrote for *Popular Astronomy* and *University Review* (today:

KCU Yearbook 1937

New Letters) ● Co-founded 1935 KCU Delta X student math club [13]

Eric Temple Bell Visiting Professor Fall 1942



MacTutor Website

Scottish • CalTech professor • Ph.D. Columbia 1912 • MAA president 1931-33 • Author of popular classics: Men of Mathematics (1937), The Development of Mathematics (1940), Mathematics: Queen and Servant of Science (1951) • Full MacTutor biography [7] • At KCU, course of 20 daytime lectures on "The Influence of Mathematics on Philosophy" &

eight evening lectures for townspeople and part-time students; "Bell is a sardonic iconoclast, hating all bunkum, gunning for all philosophers...

[his] lectures are masterpieces - clean-cut, no furry edges ..."[1]

Ferdinand P. Beer Faculty 1943-1944



Lehigh University

French • Ph.D Univ. of Geneva 1937 • After KCU, three best-selling "Beer & Johnston" mechanics texts for engineers still used in engineering classes around the world • At Lehigh University Chair 1947-1967 of mechanics department, then chair to 1977 of mechanical engineering and mechanics department • 1980 Distinguished Educator

Award from the Mechanics Division of the Science

Society ● 1995 **Honorary Doctor of Engineering**, Lehigh Univ. [6]

Maria Castellani Faculty 1946-1961



KCU Yearbook 1948

Italian ● Doctorate 1923 University of Rome ● Italian Scholar in Mathematics Bryn Mawr 1923-1924 ● Head of League of Nations Accounting Office, Geneva ● 1930s President of Mussolini's National Fascist Association for Women Artists and Graduates ● VP of International Federation of Business & Professional Women ● Wrote "[women]... should strive

incessantly to develop the best that is in us so that we may help to build a better and nobler world." [5] ● MAA MO section chair 1955 ● KCU

Lena Haag Chair in Mathematics 1957 ● 11 thesis M.A. students 1950-1958, including Juris Hartmanis (below) ● Robert H. Randolph (below) says: "The words of Dr. Maria Castellani have been the linchpin of my long and varied career (and life). [She] often regaled our small group of Mathematics students with the mantra – 'Mathematics is a way of thinking.'" [11] ● After KCU, chair, Fairleigh Dickinson Univ. Dept.

Norman N. Royall Jr. Faculty 1947-1975



KCU Yearbook 1963

Entered John B. Stetson University at 15, Ph.D. 1940
Brown University • College of Arts & Sciences Dean
1947-1953 • 1961 created 49 30-min. films, US
Armed Forces Institute for military bases worldwide
(College Algebra, Trig., & the Slide Rule) • "Founder
and first director of the Great Books program ... one of
the intellectually moving forces in Kansas City" [10] •

Wrote 3 College Algebra & Analytic Geometry texts 1963-1971 ● 1974 UM System Thomas Jefferson Award ● 1983, "Royall Hall" named for him ● Richard E. Smalley (1996 Chemistry Nobel Prize) wrote [9]: "My interest in Science had many roots. Some came from my mother ... particularly as a result of classes on the Foundations of Physical Science taught by a magnificent mathematics professor at [KCU], Dr. Norman N. Royall, Jr. I was infected by this professor second hand..."

Juris Hartmanis Graduate M.A. 1951



Assoc. of Computing Machinery (ACM)

Latvian • After KCU, CalTech Ph.D. 1955 • Research mathematician at General Electric Research Laboratory • Won the **1993 A. M. Turing Award** with Richard E. Stearns, for their seminal 1965 paper which set the foundations for the field of computational complexity theory and sparked the imagination of

many computer scientists • Helped establish computer science as a formal discipline distinct from mathematics, physics and electrical engineering • 1999 UMKC honorary Doctor of Humane Letters • 2013, elected to the National Academy of Sciences • Currently Walter R. Read Professor of Computer Science and Engineering, Emeritus, Department of Computer Science, Cornell University [2]

Yudell L. Luke Faculty 1955-1957 & 1961-1983



MacTutor Website

KC Junior College A.A. 1937 ◆ M.A. 1940 University of Illinois ◆ Special functions, asymptotic analysis, and approximation theory ◆ Starting 1946, **Midwest Research Institute**; Several of his MRI research students matured into well-known research mathematicians: J. Wimp, W. Fair and J. L. Fields ◆ 100 papers and 8 books during a highly distinguished

career, including **The Special Functions and their Approximations** (1969), **Mathematical Functions and their Approximation** (1975), **and Algorithms for the Computation of Mathematical Functions** (1977) ◆ Full MacTutor biography [7] ◆ Set up the Visiting Lecturer Program for the Society of Industrial and Applied Mathematics ◆ 1975 won a **UMKC N. T. Veatch Award for Distinguished Research and Creative Activity ◆ 1978 UM System Curator's Professor ◆ Died Moscow 1983 after giving an exchange program series of lectures**

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