

Celebrates

## BLACK HISTORY MONTH

*"We are not makers of history, we are made by history"*  
- Martin Luther King, JR.



BENJAMIN BANNEKER



J. ERNEST WILKINS, JR.

### Mathematicians

#### J. ERNEST WILKINS, JR.

November 27, 1923 -

Dr. J. Ernest Wilkins, Jr. is a past President (1974) of the American Nuclear Society. One of Wilkins' major achievements has been the development of radiation shielding against gamma radiation, emitted during electron decay of the Sun and other nuclear sources. Wilkins developed mathematical models by which the amount of gamma radiation absorbed by a given material can be calculated. This technique of calculating radiative absorption is widely used among researchers in space and nuclear science projects. In 1976, Wilkins was inducted into the National Academy of Engineering.

#### BENJAMIN BANNEKER

November 9, 1731 - October 25, 1806

A free black who owned a farm near Baltimore, Banneker was largely self-educated in astronomy by watching the stars and in mathematics by reading borrowed textbooks. He became an active writer of almanacs and was appointed by President George Washington to the District of Columbia Commission. During Thomas Jefferson's tenure as secretary of state, Banneker wrote the respected *Virginian* and attacked his proslavery stance. He criticized Jefferson, a slave owner himself, for his "absurd and false ideas" and urged him to recognize that "one Universal Father...afforded us all the same sensations and endowed us all with the same faculties."

#### DAVID HAROLD BLACKWELL

April 24, 1919 -

David Blackwell is often times referred to as the greatest African American mathematician. He earned his Bachelor of Arts in Mathematics in 1938, Master of Arts in Mathematics in 1939, and his Ph.D. in 1941, all from the University of Illinois. Blackwell is the seventh African American to receive a Ph.D. in Mathematics. He is the first and only African American to be any one of: a member of the National Academy of Sciences, a President of the American Statistical Society, and a Vice President of the American Mathematics Society.

#### ELBERT F. COX

December 5, 1895 - November 28, 1969

Elbert Cox earned his A.B. at Indiana University in 1917. After serving in the US Army in France during World War I, he returned to pursue a career in teaching, as an instructor of mathematics at a high school in Henderson, Kentucky. In December of 1921 he applied for admission to Cornell University, one of seven American universities with a doctoral program in mathematics. In September, 1925, Cox became the head of the mathematics and physics department at West Virginia State College.

#### MARJORIE LEE BROWNE

September 9, 1914 - October 19, 1979

Marjorie Lee Browne was a noted mathematics educator. She was one of the first African-American women to receive a doctorate in mathematics. Browne joined the faculty at North Carolina College, where she taught and researched for thirty years. She was also the head of the department for much of her time at NCCU, from 1951 to 1970. There she worked a principal investigator, coordinator or the mathematics section, and lecturer for the Summer Institute for Secondary School Science and Mathematics Teachers.

#### GEORGE OLATOKUNBO OKIKIOLU

1965 -

Dr. George O. Okikiolu is the father of Katherine Okikiolu. The two of them are one of the few successful father-daughter researchers' combinations in mathematics. He has published more papers, over two hundred, than any other Black Mathematician. His first paper appeared in 1967, and his Ph.D. was earned in 1972.

#### SCOTT W. WILLIAMS

April 22, 1943 -

By the time Scott Williams received a Bachelor of Science degree in Mathematics from Morgan State College he had solved 4 advanced problems in "The Mathematical Monthly", a publication of the Mathematical Association of America, and had co-authored two papers on Non-Associative Algebra with his undergraduate advisor Dr. Volodymir Bohun-Chudyniv. In 2004, Science Spectrum Magazine and Career Communications Group, Inc. selected Dr. Williams as one of the 50 Most Important Blacks in Research Science.

#### ALBERT TURNER BHARUCHA-REID

February 22, 1930 - 1985

Albert Turner Reid wrote his first paper, in mathematical biology, when he was 18. In 1961 he became an Associate Professor of Mathematics at Wayne State University in Detroit, Full Professor in 1965, and in 1970, Dean of the School of Arts and Sciences at Wayne State University. Between 1951 and 1996, Albert T. Bharucha-Reid published more than 70 papers and 6 books in algebra, analysis, mathematical biology, statistics, and topology. His first book was published in 1960.

#### RONALD E. MICKENS

February 7, 1943 -

In 1964, Ronald Elbert Mickens graduated with a B.S. in mathematics and physics from Fisk University in Nashville, Tennessee and enrolled as a graduate student in Physics at Vanderbilt University with Woodrow Wilson and Danforth Scholarships. Mickens earned a Ph.D. in Theoretical Physics from Vanderbilt in 1968. In addition to research, his efforts to open Physics to Blacks are very important and he serves as Historian for the National Society of Black Physicists. Recently, Mickens was honored with an election to Fellowship in the American Physical Society, a rare position limited to .5% of the membership of the society. In 1999, Mickens personally published a history book: *The African American Presence in Physics*, and has just published (2002) the book "Edward Bouchet, The First African-American Doctorate".

#### WILLIAM A. MASSEY

1965 -

Dr. Massey is an internationally known researcher in applied probability and has coauthored papers with colleagues from Canada, France and Israel. He has given invited lectures at the American Mathematical Society (AMS) national conference, the AMS southeastern regional conference, the Congreso Nacional de la Sociedad Matematica Mexicana, the Bouchet Conference for African and African American Physicists and Mathematicians that was held in Ghana as well as conferences held in Canada and Germany. In 1996, he was given NAM's Distinguished Service Award and invited to give the William W. S. Claytor Lecture. He a member of AMS, INFORMS and SIAM and is currently on the Executive Board of the National Association of Mathematicians (NAM). His hobbies include graphic design and photography. His interest in the former has resulted in the creation of the CAARMS logo, the Mathematicians of the African Diaspora (MAD) logo and the redesign of the NAM logo. As a result of his interest in photography, many of his photos of contemporary African American mathematicians have found a home on various webpages throughout the internet

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Central New Mexico Community College