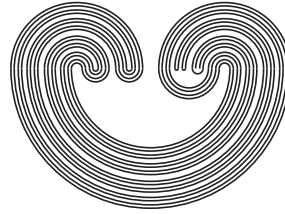

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by

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**JAMES T. ROGERS:
THE FIRST SIXTY-FIVE YEARS**

THELMA R. WEST

ABSTRACT. The continuum theory session of the Forty-First Spring Topology and Dynamics Conference was dedicated to James T. Rogers in honor of his sixty-fifth birthday. This paper is based on the talk about his life that I gave in that session.

Jim entered the world on July 26, 1942, in Statesville, North Carolina, the first child born to Pauline (née Prevatte) and James Ted Rogers, Sr. Three years later the family expanded when Jim's brother, David, was born. The birth of Nancy in 1949 completed the Rogers clan. The family was a stable and loving one.

Jim's father was employed by the United States Postal Service during most of his working years. Due to the transition by the postal service to airmail, he took an early retirement in 1970. After that he worked at various local companies. Each year he raised a large garden, growing enough food to feed his family of five for the whole year. Jim's mother stayed home and tended the children, the house, and her flower garden.

During grade school, Jim was a good student. However, he had no particular interest in mathematics at that time. His love of mathematics emerged during high school, but not right away. Jim had other interests, some that could have led him down other career paths. He was co-editor of his school newspaper, *Blue and Gray*. He

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also dabbled in dramatics, taking the Fall Dramatics course, a new enrichment class. As a result of this course, he starred in a three-act comedy *The Charm School*. In celebration of National Latin Club Week, he appeared in a dramatic play, dressed in a Roman toga. Throughout his school years, Jim was active in scouting and at the age of 16, he was awarded the rank of Eagle Scout. An all around good student in high school, Jim was honored as chief marshal of the junior class and was valedictorian of his senior class.

By his senior year, mathematics had won out over both drama and journalism. At that time, being “good in mathematics” meant going to North Carolina State to major in engineering. This was the expected path for all good math students, including the ones, like Jim, who did not like the more technical subjects, such as mechanical drawing. Fortunately for Jim, his math teacher, Mrs. Brosius, had attended a National Science Foundation summer program for math teachers. Because of this program, she realized that there were opportunities other than the engineering route for someone like Jim. Originally intending to use his National Merit Scholarship to attend North Carolina State and study engineering, Jim competed for and won the Morehead Scholarship, the first student in Iredell County to do so, to University of North Carolina at Chapel Hill. This full scholarship, as well as his teacher’s influence, led him to Chapel Hill, the Freshman Honors Program, and F. Burton Jones.

Jim had F. Burton Jones for three semesters of Honors Calculus. Jones was a wonderful teacher, although Jim did not realize how good until he had some other, less dynamic teachers. The class used a book and all the odd problems were assigned as homework, but Jones occasionally slipped in a little Moore/discovery method into the class. To prepare for the midterm exam, Jim worked some of the even-numbered problems. One in particular gave him some difficulty. When Jim asked Jones about the problem, Jones did not seem to consider it very important and said something to the effect that “if you had to do it, you probably could.” Relieved, Jim forgot about the problem. That is, he forgot about it until the next day, when that unimportant problem was one of four problems on the midterm. Jones, with a sly twinkle in his eye said, “My apologies, Mr. Rogers,” as he gave Jim his test. But Jones was correct; Jim did manage to solve the problem.



F. Burton Jones and Jim Rogers (around 1985)

At the beginning of Jim's junior year of college, he took topology from Wayne Patty. The book used was Hocking and Young, and the other students in the class were advanced undergraduates and graduate students, almost all of whom were familiar with compact spaces and connected sets. For Jim, these were entirely new concepts, never having taken real analysis. When Jim walked into the final, the big picture was still not clear to him, but he was sure of the fact that "compact" implied "countably compact." Afterwards, when asked about the final, Jim said it was "the hardest exam I have ever taken." Actually, it was twice as hard as he thought it had been. He found out later that there were more problems on a second page of the exam. It had not occurred to him to turn the page!

In 1964, Jim graduated with honors from the University of North Carolina (UNC) at Chapel Hill. He spent the summer at Duke University, one of only eight students to receive a stipend from the National Science Foundation to pursue independent undergraduate mathematical research. At Duke, he studied algebraic topology and measure theory under the supervision of Dr. W. R. Hare.

In the fall, Jim headed for the University of California (UC) at Riverside where he had been awarded a graduate assistantship, joining his mentor, F. Burton Jones, who had left UNC in 1962. Jim's studies were almost cut short in August of 1966, when he

received notice of his 1-A classification for the draft. Fortunately, he was successful in his appeal to the Statesville, North Carolina, draft board. Instead of going to Vietnam, he was able to stay at UC Riverside, earning his master's degree in mathematics in 1966 and his Ph.D. under Jones in 1968. While working on his doctorate, Jim was awarded a National Aeronautics and Space Administration fellowship. He worked briefly as a numerical analyst for Aerospace Corporation in San Bernardino, California.

At Riverside, Jim not only matured mathematically, he also matured into a responsible family man. In 1966, he married the beautiful California native, Pamela Ann Loudon. Pam, an undergraduate at the UC Riverside, majoring in art history, was commissioner of social affairs, a position in the student government and a former queen of the local order of Job's Daughters, a Masonic youth organization. In 1967, Jim and Pam had their first child, James Ted Rogers, III.

After graduation, Jim headed for New Orleans and Tulane University. Jim was excited about his new faculty position as an assistant professor at Tulane. One of the reasons he had accepted this position, was that both Gail Young and Bruce Treybig were on the faculty. His hopes of working with these two giants in the field were dashed when he arrived: both were on leave for the 1968-1969 school year. Both would be returning but for only one school year when they would be leaving Tulane permanently to join the faculties of other universities. Nonetheless, things worked out for Jim at Tulane. He successfully conducted his own research and he was able to collaborate with other members of the faculty. His growing reputation resulted in much traveling within the U. S. and abroad, both to present his work at conferences and to collaborate with other mathematicians. Jim was always fully engaged in activities on the Tulane campus. He won several teaching awards, received numerous National Science Foundation grants, did a four year tour of duty as department chair, and even became an intramural athletic star. In 1973, Jim was promoted to associate professor, and by 1977, Jim was a full professor and a well established leader in the field of continuum theory.

Jim flourished and developed personally as well as professionally in the Big Easy. Pam and Jim's second child, Stephanie, was born in 1973. During most of this time, Pam was a stay-at-home mother

and a part-time student in the fine arts. Pam's devotion to Jim and their children and her work on the home front allowed Jim to become the success in mathematics that he is today.

Just as Jim had come to Tulane in 1968 as a new Ph.D. to work with leaders in the field of continuum theory, not many years passed until new Ph.D.s were coming to Tulane in order to work with Jim. Among those post-doctorates who came to Tulane specifically to work with Jim were Lex Oversteegen, Wayne Lewis, Judy Kennedy, Paweł Krupski, Michael Levin, and David Ryden. Jim has also been passing on his mathematical legacy by directing the dissertations of Ph.D. students. His first student was Ray Russo in 1975, followed by Ann Petrus in 1976, Anne Dilks (Dye) in 1980, Karen Villarreal in 1991, Julien Doucet and Sergio Macias in 1992, and Patrick Vernon in 2006. Jonathan Meddaugh is currently working on his Ph.D. with Jim.

When the children were a bit older, Pam returned to school as a serious student. In 1978, she earned a double master's degree in Early Childhood Development and Developmental Psychology, and shortly after graduation, she started her career as a school teacher. This was a financial boost to the family. Pam's job permitted her and the children to continue to accompany Jim in the summers when he had extended visits to other universities. There were many such trips, including visits to both Wisconsin and Texas to work with Bing, to California to work with Hagopian and Marsh, and to New York to work with McAuley.

In the 1980s, Jim attended a dynamical systems talk by Bob Williams in which inverse limits were employed. It was the first time Jim realized the intimate connection between his work and dynamical systems. These connections became clearer to him while preparing a talk for the Joint Summer Research Conference on Relationships between Continuum Theory and the Theory of Dynamical Systems. This conference, held in Arcata, California, in 1989, sparked his interest even more in the connection between these two areas of mathematics. Many of his mathematical results since that time have dealt with dynamical systems.

Jim and Pam both readily adapted to New Orleans: coming to love the culture and the atmosphere of the city and to enjoy Mardi Gras, the French Quarter, the cuisine, and the "laissez les bon temps rouler" attitude of the New Orleanians. They also became

expert Cajun dancers. Even the threat of hurricanes did not deter their love of that unique city. Until 2005, a hurricane warning just meant, at worst, a temporary exile from the city and a party. This changed in August of 2005 with the arrival of Katrina. Pam and Jim rented temporary quarters in Lafayette after the “short trip” to Lafayette turned into a five month exile when Tulane closed its doors for the entire fall semester. Once the water receded, they made numerous trips back and forth to New Orleans to deal with their damaged home. They endured flat tires because of the debris, no electricity or water while cleaning out rotten food, haggling with insurance agents, and desperate attempts to get repairs done to their home. Still they love their adopted city and have no plans to leave it.

This past summer, Jim celebrated his sixty-fifth birthday. The fall of this year (2008) will be the fortieth anniversary of Jim’s tenure as a mathematics professor at Tulane. The first sixty-five years of Jim’s life have been a success, both personally and professionally. We all expect many more such years to follow.

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