

# 2014 Pioneer in Tech Award Recipient Eleanor Kolchin

Eleanor Kolchin graduated from Brooklyn College in 1947 with a Bachelor's degree in Mathematics. She was treasurer of Pi Mu Epsilon, the national honorary mathematics society. After a short period of teaching math at the high school level, she was hired by IBM in 1947, and eventually became the tabulating supervisor of the computing staff at IBM's Watson Scientific Computing Laboratory at Columbia University. The Watson Lab was one of the first to apply business machines for scientific research. While working at the Lab, she was able to attend classes toward a Master's degree in Math at Columbia.

Dr. Wallace Eckert, the director of the Watson Lab, was an astronomy professor at Columbia University and one of the first assignments he gave Eleanor was computing the orbits of a number of asteroids. The early computers were plugboard computers; each program required wiring a different plugboard to be inserted into the computer. Many projects were being developed at the Lab. A famous one was Fortran, a widely used scientific computer language and another was the extremely accurate calculations of the phases of the moon, which were ultimately used in our moon landings. A new computer built at the time was the SSEC, which occupied an entire room, enabling us to compute with high accuracy, the orbits of the outer planets.

Prof. Louis Green of Haverford College came to the Watson Lab to do his research in astrophysics. After Eleanor left IBM to raise a family, she worked for Dr. Green for many years solving various differential equations and doing Fortran programming. Many papers were published in this time. Dr. Green was given computing time on the new powerful CDC computer at NYU, which

Eleanor used. She was subsequently hired part time by NYU when Dr. Green retired. One of her many jobs was as a consultant to researchers using Fortran programs.

Eventually she ended up developing web pages for various NYU projects. She retired from NYU in 2006.

Eleanor still is using her computer skills in maintaining a website and database for over 1,000 people as a volunteer at her Florida Country Club.