

**Meeting:** 1003, Atlanta, Georgia, SS 3A, AMS-MAA Special Session on History of Mathematics, I

1003-01-1652      **K Prabakaran\*** ([rpraba@eate1.net](mailto:rpraba@eate1.net)), Dr. K. Prabakaran, Southern University, Baton Rouge, LA 70813. *On the Historic Methods used in Approximating  $\pi$ .*

Systematic calculations of  $\pi$  began with the work of Archimedes in 250 BC. We consider the initial approximation for  $\pi$  used in the chord system (Ptolemy, 150 A.D.) and the initial approximation used in the half-chord system (Aryabhata, 499 A.D.). As per the methods used in deriving each of these approximations, there are conflicting theories presented by the historians. We intend to address these conflicting theories conclusively, based on rigorous mathematical calculations. (Received October 06, 2004)