

**Keynote Speaker:
Andrew D. Booth**



This photograph taken in November 1946 shows, left to right, Kathleen Britten (now Mrs. Booth), Xenia Sweeting, and Andrew Booth. This is the team that designed and built the original ARC Computer at the University of London.

Early Computer Arithmetic

Abstract

This is an informal discussion of the development of the Booth multiplication algorithm and the implementation of digital arithmetic in early computers.

Professor Andrew D. Booth was educated in England, was a Professor in England and Canada, and has held visiting Professor positions in Europe and North America.

He developed "Booth's Algorithm" for two's complement multiplication, the APEXC computer at the University of London (one of the world's first three electronic digital computers), and the M3 series of computers at the University of Saskatchewan (the first all Canadian electronic computers).

Professor Booth is the editor of nine books and the author or co-author of nine books (including *Automatic Digital Calculators*, co-authored with Kathleen Booth in 1953), over 300 scientific and technical papers in refereed journals, and over 2,000 articles and assorted contributions to scientific, technical, and academic media.