

Robert C. Ball
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Education

1974	B.S., Physics, Michigan State University
1979	Ph.D., High Energy Physics, Michigan State University (Thesis advisor, K.W.Chen)

Positions Held

1979–1982	Postdoctoral Scholar, University of Michigan
1982–1987	Assistant Research Scientist, University of Michigan
1988–1995	Associate Research Scientist, University of Michigan
1995–1996	Senior Research Scientist, University of Michigan
1996–Present	Senior Research Assoc. Science and Eng., University of Michigan

Research Activities

Robert Ball has been working most recently on data acquisition software and hardware for testing the ATLAS MDT chambers. This includes the development of a PC-based Mini Data Acquisition software suite utilizing Labwindows/CVI software from National Instruments. He has a long standing expertise in data acquisition software dating back to some of the earliest days of FNAL. He was a part of the SDC collaboration team at the SSC which produced the UNIDAQ suite of portable, UNIX-based DAQ software. For the L3 experiment he assembled and operated a Fermilab ACP/R3000 parallel processing farm which was the largest, non-CERN computing resource for the L3 experiment over a period of several years. More recently he took the lead in ensuring that a modern network backbone was installed in the physics building complex at the University of Michigan and is still called upon to help trouble shoot difficulties when they arise. As a staff member of the HEP electronics shop at Michigan he administers or oversees the administration of the HEP UNIX clusters. As the ATLAS activity unfolds he intends to take an active role in the Michigan efforts in ATLAS data acquisition, in the establishment and operation of the ATLAS/CDF/DØ computing cluster, and in collaborative work with the UM School of Information.

Publications

1. Software for UNIX-based Data Acquisition, UNIDAQ Documentation Set v2.2, Editor R. Ball, SDC-93-573, UM-HE-93-29, Sept, 1993.
2. Communications and Control Mechanisms in the Unix-Based UNIDAQ Data Acquisition Software, IEEE Transactions on Nuclear Science, Real-Time 95 Conference Record.