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Itala M. Loffredo D'Ottaviano* (itala@cle.unicamp.br), Av. José Bonifácio, 1967, J. Paineiras, Campinas, São Paulo 13092-305, Brazil. *On the development of paraconsistent logic and da Costa's work.*

Paraconsistent logics are the logics of inconsistent but nontrivial theories. A deductive theory is paraconsistent if its underlying logic is paraconsistent. The first logician to construct a formal system of paraconsistent logic was Jaskowski in 1948. In 1958 da Costa, independently, began the general study of contradictory systems. We shall present a survey on the development of paraconsistent logic, emphasizing da Costa's work. From 1963, da Costa has developed several systems and theories related to paraconsistency, apparently becoming the first logician to develop strong paraconsistent logical systems which could be useful for mathematics, empirical and human sciences. Da Costa and collaborators, from several countries, have introduced and studied many paraconsistent logics and set theories, appropriate semantics and algebras associated to the systems, decidability procedures, paraconsistent model theories, a paraconsistent differential calculus; and have studied applications to the foundational analysis of physical theories and to partial truth. Nowadays, paraconsistency has become a field of knowledge and there have been applications of paraconsistent logic not only to the foundations of science and its philosophical analysis, but even to informatics and technology. (Received February 28, 2008)