

Remarks on the applications of paraconsistent logic to physics

da Costa, Newton C. A. and Krause, Décio (2003) Remarks on the applications of paraconsistent logic to physics.

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Abstract

In this paper we make some general remarks on the use of non-classical logics, in particular paraconsistent logic, in the foundational analysis of physical theories. As a case-study, we present a reconstruction of P.-D. F\'evrier's 'logic of complementarity' as a strict three-valued logic and also a paraconsistent version of it. At the end, we sketch our own approach to complementarity, which is based on a paraconsistent logic termed 'paraclassical logic'.

Keywords: paraconsistent logic, complementary logic, Paulette Février

Subjects: [Specific Sciences: Physics: Quantum Mechanics](#)

ID Code: 1566

Deposited By: [Krause, Décio](#)

Deposited On: 13 January 2004