

## The logic of complementarity

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## **Abstract**

This paper is the sequel of a previous one where we have introduced a paraconsistent logic termed paraclassical logic to deal with 'complementary propositions'. Here, we enlarge upon the discussion by considering certain 'meaning principles', which sanction either some restrictions of 'classical' procedures or the utilization of certain 'classical' incompatible schemes in the domain of the physical theories. Here, the term 'classical' refers to classical physics. Some general comments on the logical basis of a scientific theory are also put in between the text, motivated by the discussion of complementarity.

**Keywords:** complementarity, paraconsistent logic, paraclassical logic

Subjects: Specific Sciences: Physics: Quantum Mechanics

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