Elementary Model of Constraint Quantization with an Anomaly

J. SCOTT LITTLE, JOHN KLAUDER, University of Florida — Quantum gravity is made more difficult in part by its constraint structure. The constraints are classically first class; however, upon quantization they become partially second class. To study such behavior, we focus on a simple problem with finitely many degrees of freedom and demonstrate how the projection operator formalism for dealing with quantum constraints is well suited to this type of example.

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