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## Classical and quantum aspects of a constrained FT

*Thursday 6 April 2023 15:00 (30 minutes)*

The classical and quantum properties of systems maybe drastically affected by imposing constraints in their phase space. Desirable properties such as unitarity and renormalizability may not be retained. In this general context we consider a specific model which by construction is also classically integrable. After imposing a constraint we show that at tree level integrability is preserved and particle production or transmutation are not-allowed. In addition, the constrained model remains renormalizable. We compute its beta-function and argue consistency with the expected reduction of the degrees of freedom due to the constraint.

**Presenter:** SFETSOS, Konstantinos (National and Kapodistrian University of Athens (GR))

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