

QUANTIZATION OF THEORIES WITH LOCAL SYMMETRIES
IN PERTURBATIVE ALGEBRAIC QFT

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The principle of local gauge invariance is one of the building blocks of many modern physical theories. In quantizing theories with local (for example gauge) symmetries a method commonly used is the Batalin-Vilkovisky (BV) formalism. In the present talk I will present recent results concerning the formulation of the BV methods in the framework of perturbative algebraic quantum field theory. In particular I will provide a definition of the renormalized quantum BV-operator and show how it is related to the master Ward identity known in causal perturbation theory.