

Quantum Master Equation for Yang-Mills theory in the exact renormalization group

— 正則化のもとで対称性はどう維持されるか —

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- Gauge symmetry is present even with an IR cutoff
cf. GW-relation: a well-known example of a symmetry in a regularized theory
- Expression of the WT identity in the presence of the cutoff
 - Taking care of the UV divergence / an action at a UV scale
 - BRS transformation and the composite operators
- The nilpotent BRS transformation and the role of the anti-field formalism
 - Relation of quantum master equation and WT identity (without anti-fields)

五十嵐尤二（新潟大学教育）、園田英徳（神戸大）両氏との共同研究に基づいています。（論文準備中）