

Theory Seminar

Monday, November 14, 2011 2:10 PM 831 Pupin Hall

Renormalization Group Flows in Diverse Dimension

If the coupling constants in a general QFT are promoted to functions of space-time, the dependence of the path integral on these couplings is highly constrained by conformal symmetry. We use this simple observation to derive the β -theorem. We also study simple examples of the general procedure. Finally, we discuss the dependence on the coupling constants in arbitrary two-dimensional RG flows. The constraints of conformal symmetry lead to a new proof of Zamolodchikov's theorem.



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