



istanbul matematiksel bilimler merkezi
istanbul center for mathematical sciences

BOĞAZIÇI UNIVERSITY QFT LECTURE MEETINGS

RENORMALIZATION OF 4-D ϕ^4 SCALAR FIELD THEORY I

Burak Kaynak

Boğaziçi University

Topics

Brief discussion on power counting argument. Quantum effective action to order \hbar in Euclidean metric. Dimensional regularization. First aid to compute the resulting determinant. Mass and coupling constant renormalization by minimal subtraction method.

General References

Weinberg S., The Quantum Theory of Fields, Volume 1.

Brown L.S., Quantum Field Theory.

Date : Friday, December 28, 2012

Time: 14:00-17:00

Place: IMBM Seminar Room, Boğaziçi University South Campus