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The Geometric Construction of WZW Effective Action in Noncommutative Manifold HOU Bo-Yu, WANG Yong-Qiang, YANG Zhan-Ying and YUE Rui-Hong

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Abstract: By constructing close-one-cochain density Ω_{2n}^{-1} in the gauge group space we get the Wess-Zumino-Witten (WZW) effective Lagrangian on high-dimensional noncommutative space. Especially consistent anomalies derived from this WZW effective action in noncommutative four-dimensional space coincide with those obtained by L. Bonora etc. (hep-th/0002210).

PACS: 46.10.+z Key words: noncommutative space, WZW effective action, close cochain, consistent anomaly

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