

1135-82-1064

Assane Lo* (assanelo@uowdubai.ac.ae), University of Wollongong in Dubai Block 15, 204, Knowledge Park PO Box 20183, Dubai, UAE, Dubai, United Arab Emirates. *Witten Laplacian method for Bose Einstein Condensation.*

After six decades of work we still do not have a proof of the Bose Einstein Condensation in any continuum model. Recent experiments on dilute Bose gases of atoms seem to confirm that the Bose Einstein Condensation occurs in weakly interacting systems. We use the Witten Laplacian formalism to derive estimates that are suitable for proving the Bose Einstein Condensation in classical continuum models of Kac type. (Received September 19, 2017)