



**Sudan University of Science and Technology**  
**College of Graduate Studies**



## **Spectral Bounds and Stability Estimates for Dirichlet and Neumann Laplacian with Lebesgue Classes**

**حديات الطيف وتقديرات الاستقرار لللابلاسية ديرشلت ونيومان طبقا لعائلات لبيق**

**A Thesis Submitted in Fulfillment of the Requirements for the Degree  
Of PH.D in Mathematics**

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