INTRODUCTION

Our purpose is to study the boundary behavior of a subharmonic function on a cylinder.

In chapter I of this thesis, we gather some definitions and results of semicontinuous functions, measure and integral which are well-known and which are used in this thesis

In chapter II, we introduce superharmonic and subharmonic functions on an open set in R^n and polar sets.

In chapter III, it deals with the generalized Dirichlet solution for a continuous function and an indicator function on a bounded open set in R^n.

Finally in chapter IV, we study the growth of the generalized Dirichlet solution on a bounded cylinder and use this result for studying a subharmonic function on a cylinder