

CHAPTER I

INTRODUCTION

Our aim is to extend the Elementary Integral Geometry of sets of points, sets of pairs of points, sets of straight lines, sets of pairs of straight lines and sets of kinematics to the Integral Geometry of sets of circles, sets of pairs of circles and sets of pairs of kinematics.

In Chapter II of this Thesis, we introduce some definitions which will be a basic tool for our investigation.

In Chapter III, we give some of the well - known theorems of Integral Geometry over sets of points, sets of pairs of points, sets of straight lines, sets of pairs of straight lines and sets of kinematics.

In Chapter IV, we introduce some new theorems over sets of circles, sets of pairs of circles and sets of pairs of kinematics.