
Preface

The German title of this book is “Elementare algebraische Geometrie”. This indicates that the aim of this book is an introduction to algebraic geometry using only a minimum of required prerequisites. This book originated from a one semester course aimed at 3rd or 4th year students at the University of Hannover who had attended the standard courses on algebra and complex analysis. Beyond this very little is required.

It is one of my main aims to illustrate the relationship between the general theory on the one hand and various applications and examples on the other hand. I have decided not to introduce any sheaf theory or cohomology theory at all. Whereas these topics are essential for anybody who wants to do research in the subject, I believe that one can give an introduction into algebraic geometry without using these concepts. I hope, however, that this book will help the reader to progress to more advanced textbooks such as Hartshorne’s.

Clearly this book is influenced by previous textbooks. As the reader will notice, this is most notably the case with M. Reid’s book *Undergraduate Algebraic Geometry*. In particular, chapter V about the 27 lines on a cubic surface is very closely based on his treatment. I have been in contact with M. Reid at various stages while writing my book and I am grateful for his encouragement to publish this book.

My particular thanks go to H. Verrill, who translated this book into English. She has done a very good job, and her impact goes far beyond that of a normal translator. She has made very useful suggestions for corrections and improvements throughout the entire text and has thus helped to improve the presentation considerably.

We are grateful to S. Endrass for allowing us to incorporate a picture of the Clebsch diagonal cubic which was produced with the help of his software package Surf.

Klaus Hulek