Preface

The remarkable work of Shokurov (1992) have opened up new directions birational geometry and the minimal model program. The purpose of these notes is to give an introduction to one of these new developments – the theory of complements. Roughly speaking, a complement is a "good" divisor in the anticanonical or multiple anticanonical linear system. The existence of such divisors is very useful in studying singularities, Mori contractions and Fano varieties.

The book starts with preliminaries, basic definitions and properties. The main part contains two central results on two-dimensional complements. In the last part the classification problem of exceptional complements is discussed. It seems that methods developed in the book are rather general and may have a number of further applications.

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