The Riemann-Roch theorem

Following some unpublished results by A. Grothendieck

Armand BOREL and Jean-Pierre SERRE

1958

!TODO! Translator's note. What follows is a translation of the paper "Le théorème de Riemann-Roch", Armand Borel and Jean-Pierre Serre. *Bulletin de la S.M.F.*, tome 86 (1958), p. 97–136.

Introduction

What follows constitutes the notes from a seminar that took place in Princeton in the autumn of 1957 on the works of Grothendieck; the new results that are included are due to Grothendieck; our contribution is solely of an editorial nature.

The "Riemann-Roch theorem" of which we speak here holds true for (non-singular) algebraic varieties over a field of arbitrary characteristic; in the classical case, where the base field is $\mathbb{C}$, this theorem encapsulates, as a particular example, the result proven a few years ago by Hirzebruch.[**?**]

References