SHORT NOTES ON...

Contents

| 1. | Example section | 1 |
|------------|-----------------|---|
| References | | 1 |

1. Example section

Hirzebruch–Riemann–Roch [Har77, Thm. A.4.1] states that for a locally free sheaf $\mathcal E$ of rank r on a nonsingular projective variety X of dimension n,

$$\chi(\mathcal{E}) = \deg(\operatorname{ch}(\mathcal{E}).\operatorname{td}(\mathcal{T}))_n$$

where ()_n denotes the component of degree n in $A(X) \otimes \mathbb{Q}$.

REFERENCES

[Har77] Robin Hartshorne. *Algebraic geometry*. Graduate Texts in Mathematics, No. 52. Springer-Verlag, New York-Heidelberg, 1977, pp. xvi+496. ISBN: 0-387-90244-9.

Pedro Núñez

ALBERT-LUDWIGS-UNIVERSITÄT FREIBURG, MATHEMATISCHES INSTITUT ERNST-ZERMELO-STRASSE 1, 79104 FREIBURG IM BREISGAU (GERMANY) Email address: pedro.nunez@math.uni-freiburg.de Homepage: https://home.mathematik.uni-freiburg.de/nunez

I would like to thank the DFG-Graduiertenkolleg GK1821 "Cohomological Methods in Geometry" for their support!

Date: 16th March 2021.