

# Intersection theory

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Following the new book by Eisenbud-Harris, we will discuss basic topics in intersection theory and their implementation in the new SINGULAR library `schubert3.lib`. Keywords include abstract varieties, chow rings, vector bundles and Chern classes, lines on hypersurfaces, Chow Rings of projective bundles, Segre classes, Porteous' formula, excess intersection formulas, and the Grothendieck-Riemann-Roch theorem.

Time permitting, we will also treat themes such as equivariant intersection theory, localization and the Bott residue formulae, quantum cohomology, and Gromov-Witten theory.