Eine Woche, ein Beispiel
10.6 Chow group notation

Ref:
Murre, Jacob P., Jan Nagel and Chris A. M. Peters. Lectures on the Theory of Pure Motives. Univ. Lect. Ser. Providence, RI: American Mathematical Society (AMS), 2013.

Setting: X : sm proj variety over k

$$\operatorname{Pic} X \overset{\mathbb{Z}^{\rho(X)}}{\supset} \underbrace{\operatorname{Pic}^{\tau} X}_{N^1(X)} \overset{\text{torsion}}{\supset} \underbrace{\operatorname{Pic}^{0} X}_{NS(X)} \overset{\text{scheme}}{\supset} 0$$

$i=1$:

$$\begin{array}{lllll}
\mathrm{Div}(X) & Z^i(X) & & \mathrm{Pic}(X) & CH^i(X) \\
\| & & & & \\
\mathrm{Div}^{\tau}(X) = \mathrm{Div}_{num}(X) & Z^i_{num}(X) & & N^i(X) & Nm^i(X) \\
\text{X is alg} \ \| & \| & & \mathrm{Pic}^{\tau}(X) & CH^i_{num}(X) \\
\mathrm{Div}_{hom}(X) & Z^i_{hom}(X) & & \mathrm{Pic}^{\tau}(X) & CH^i_{hom}(X) \\
H^2(X,\mathbb{Z})_{tor} \| & & & & \\
\mathrm{Div}_{alg}(X) & Z^i_{alg}(X) & & \mathrm{Pic}^0_{red}(X) & CH^i_{alg}(X) \\
\| & & & & \\
Z^i_{rat}(X) & & & &
\end{array}$$

$$NS(X) \overset{k=\mathbb{C}}{=\!=} H^2(X,\mathbb{Z}) \cap H^{1,1}(X)$$

[algebraic geometry - Motive of a curve and its Jacobian - Mathematics Stack Exchange](https://math.stackexchange.com/questions/1274303/motive-of-a-curve-and-its-jacobian)

[algebraic geometry - What is this cycle on the Jacobian of a curve? - Mathematics Stack Exchange](https://math.stackexchange.com/questions/681492/what-is-this-cycle-on-the-jacobian-of-a-curve?rq=1)

[algebraic geometry - Chow motives of quadratic fields - Mathematics Stack Exchange](https://math.stackexchange.com/questions/854610/chow-motives-of-quadratic-fields?rq=1)

Kunneth is complicated for Chow ring
[ag.algebraic geometry - Chow ring of two varieties - MathOverflow](https://mathoverflow.net/questions/159959/chow-ring-of-two-varieties)
https://mathoverflow.net/questions/6834/kunneth-formula-for-motivic-cohomology

sheaf version of Chow group:
https://math.stackexchange.com/questions/3019937/chow-groups-with-coefficients-in-a-local-system

Examples:

https://mathoverflow.net/questions/275674/jacobians-of-curves-with-maximal-picard-number
https://mathoverflow.net/questions/219312/what-is-the-formula-for-the-homology-class-represented-by-the-diagonal
https://mathoverflow.net/questions/74181/cohomology-class-of-the-diagonal
https://math.stackexchange.com/questions/1506182/pull-back-of-push-out-under-the-diagonal-embedding

Computaion with sage (for toric varieties)
[The Chow group of a toric variety - Schemes
(sagemath.org)](https://doc.sagemath.org/html/en/reference/schemes/sage/schemes/toric/chow_group.html)