

may be considered a family of manifolds
s.t. $T_0 = H_1$, $T_1 = H_2$.

$$\Rightarrow m_{p_1}((V \cap T_0) \cdot (W \cap T_0))_{T_0} = \text{mult}_{p_2}((V \cap T_1) \cdot (W \cap T_1))_{T_1}$$

$$\quad \quad \quad // \quad \quad \quad //$$

$$\text{mult}_{p_1}((V \cap H_1) \cdot (W \cap H_1))_{H_1} = \text{mult}_{p_2}((V \cap H_2) \cdot (W \cap H_2))_{H_2}$$

When we get a tube T , we may use the normal vectors to α (actually Z^*) (Refer to p 46 Product Neighborhood Theorem, Topology from the differential viewpoint by J. Milnor), i.e., normal bundle of Z^* .

Problem which bothers me continuously.

P 48 Hartshorne, Algebraic Geometry.

Our main task in this section will be the definition of the degree of a variety Y of dimension r in \mathbb{P}^n . Classically, the degree of Y is defined as the number of points of intersection of Y with a sufficiently general linear space L of dimension $n-r$. However, this definition is difficult to use. Cutting Y successively with $n-r$ sufficiently general hyperplanes, one can find a linear space L of dimension $n-r$ which meets Y in a finite number of points (Ex 1.8). But the number of intersection points may depend on L , and it is hard to make precise the notion "sufficiently general."