CONGRUENT ZETA FUNCTIONS. NO.12

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Let X be an affine algebraic cuve, $\bar{X}$ its compacctification.

The algebra $A = \mathcal{O}_x(X)$ carries the information we need to consult X. (In deed, we have $X = \operatorname{Spec} A$.) The Laurent expansion $A \subset \oplus_j \mathbb{C}((X_j))$ gives an embedding in a way such that A is a "half dimensional" vector subspace of $\oplus_j \mathbb{C}((X_j))$. In other way, the embedding gives a point on a "Grassmann manifild." The coordinate of the Grassmann manifold, given by Plücker coordite, is telated to the "theta function" of X.