

the flecnode curves. Combining this result with the theorem of the Tôhoku paper we have the following theorem.

THEOREM. *The planes osculating the flecnode curve, the complex curve and the harmonic curve at the six points in which these curves cut a line element of their supporting ruled surface, will belong to a pencil, if, and only if,*

$$D \equiv p_{21}^2 \Delta_1 - p_{12}^2 \Delta_2 = 0.$$

Since, when $\Delta_1 = \Delta_2 = 0$, the flecnode curves are plane, the theorem of Fubini-Čech appears as a special case of the preceding theorem.

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NETS OF CONICS IN THE GALOIS FIELDS OF ORDER 2^n *

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We consider a net of conics in the Galois fields of order 2^n

$$(1) \quad \lambda C_1 + \mu C_2 + \nu C_3 = 0,$$

where

$$C_i \equiv a_i x^2 + b_i y^2 + c_i z^2 + f_i yz + g_i zx + h_i xy, \quad (i = 1, 2, 3),$$

and where C_i has the discriminant†

$$\Delta_i \equiv f_i g_i h_i + a_i f_i^2 + b_i g_i^2 + c_i h_i^2.$$

Such a field is denoted for brevity by the symbol $GF(2^n)$. Along with (1) we consider the cubic curve in λ, μ, ν that is obtained by equating to zero the discriminant of the general conic of (1)‡

* Presented to the Society, December 31, 1926.

† See A. D. Campbell, *Plane cubic curves in the Galois fields of order 2^n* , *Annals of Mathematics*, vol. 27 (1926), p. 395.

‡ Compare C. Jordan, *Réduction d'un réseau de formes quadratiques*, *Journal des Mathématiques*, (6), vol. 2 (1906), p. 412.