T^2_g and both pencils contain at the same time the ray at infinity of the plane $\overline{gk}$. The latter is a line through which the bitangential planes of C^3 pass; the point in Σ_1 corresponding to it is D_u. So the point C_u is found by constructing the plane $T^2{}_g T^2{}_k D_u$ and determining its point of intersection with $K^5{}_u$.

Physics. — „*On the vibrations of electrified systems, placed in a magnetic field. A contribution to the theory of the* ZEEMAN-*effect*". By Prof. H. A. LORENTZ.

(Will be published in the Proceedings of the next meeting.)

Mathematics. — „*On Trinodal Quartics*". By Prof. JAN DE VRIES.

1. If we consider the nodes D_1, D_2, D_3 of a trinodal plane quartic as the vertices of a triangle of reference, that curve has an equation of the form:

$$\Gamma_4 \equiv a_{11}\, x_2^2\, x_3^2 + a_{22}\, x_3^2\, x_1^2 + a_{33}\, x_1^2\, x_2^2 + \\ + 2\; x_1\, x_2\, x_3\, (a_{12}\, x_3 + a_{23}\, x_1 + a_{31}\, x_2) = 0 \quad . \quad . \quad (1)$$

The equations

$$\Phi_2 \equiv b_1\, x_2\, x_3 + b_2\, x_3\, x_1 + b_3\, x_1\, x_2 = 0\;, \quad . \quad . \quad . \quad . \quad (2)$$

$$\Psi_2 \equiv c_1\, x_2\, x_3 + c_2\, x_3\, x_1 + c_3\, x_1\, x_2 = 0 \quad . \quad . \quad . \quad . \quad . \quad (3)$$

then represent two conics passing through the nodes.

If the coefficients of these equations satisfy the conditions

$$b_1\, c_1 = a_{11}\,, \quad b_2\, c_2 = a_{22}\,, \quad b_3\, c_3 = a_{33} \quad , \quad . \quad . \quad . \quad (4)$$

it is evident from the identity

$$\Phi_2\, \Psi_2 - \Gamma_4 \equiv x_1\, x_2\, x_3\, \Sigma\, (b_1\, c_2 + b_2\, c_1 - 2\, a_{12})\, x_3 \,. \quad . \quad . \quad (5)$$

that the two new couples of points common to Γ_4 and each of the two *associated* conics Φ_2 and Ψ_2 are situated on the right line corresponding to the equation

$$\Sigma\, (b_1\, c_2 + b_2\, c_1 - 2\, a_{12})\, x_3 = 0 \quad . \quad . \quad . \quad . \quad . \quad (6)$$