

**Olga ILYASOVA, Vladimir VOLKOV**

Siberian State Automobile and Highway Academy (SibADI)

Descriptive geometry, engineering and computer graphics

prosp. Mira 55a 644-077 Omsk - RUSSIAN FEDERATION

Tel./ fax: +7 906 918 10 47, e-mail: ilyasovaolga@mail.ru

## SYMBOL DEFINITION OF STRUCTURAL CHARACTERISTICS OF MULTIDIMENSIONAL SURFACES

*Theorem.* Hypersurface in four-dimensional space  $E_4$ , with generating line, satisfying the

generalized condition of incidence  $(e_{4,2}^{1,0})^2 \cdot e_{4,1}^{1,0}$ , is a hypersurface of second order of the first class.

Hypersurface  $(e_{4,2}^{1,0})^2 \cdot e_{4,1}^{1,0}$  is defined by two guide planes, which do not intersect in a straight line in  $E_4$ , and generating a direct parallel to the plane.

$KN (K_1N_1, K_2N_2, K_3N_3)$  – generating a hypersurface.

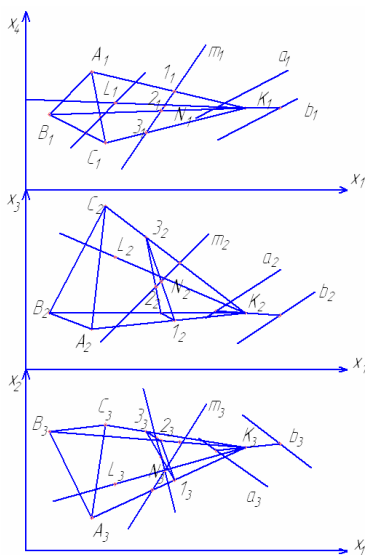


Fig. 1 - Construction of the generating of a hypersurface  $(e_{4,2}^{1,0})^2 \cdot e_{4,1}^{1,0}$