

**Meeting:** 1006, Lubbock, Texas, SS 6A, Special Session on Real Algebraic Geometry

1006-14-40            **Victor I. Zvonilov\*** (zvonilov@syktsu.ru), Syktyvkar State University, Oktyabrskii pr. 55,  
167001 Syktyvkar, Russia. *Rigid isotopies of real  $y$ -trinomial curves*. Preliminary report.

An algebraic curve  $y^n + p(x)y^m + q(x) = 0$ , where  $\mathbf{deg} p \leq k(n - m)$ ,  $\mathbf{deg} q \leq kn$  is called  *$y$ -trinomial curve*. It is natural to consider it as a curve of bidegree  $(0, n)$  on the Hirzebruch surface  $\Sigma_k$ . The curve is nonsingular if the  $y$ -discriminant  $d = (-1)^{n-1}m^m(n - m)^{n-m}p^n + n^nq^{n-m}$  has no multiple roots and  $\mathbf{deg} d = kn(n - m)$ . The rigid isotopies of nonsingular real  $y$ -trigonal curves, i.e. the isotopies in the class of nonsingular real  $y$ -trigonal curves with fixed  $k, m, n$ , are studied. The rigid isotopy classification of nonsingular real  $y$ -trigonal curves with  $d < 0$  is obtained. The classification is formulated in terms of Grothendieck's *dessins d'enfant*. (Received January 23, 2005)