Meeting: 1006, Lubbock, Texas, SS 8A, Special Session on Invariants of Links and 3-Manifolds

1006-57-193 Vladimir V. Chernov\* (Vladimir.Chernov@dartmouth.edu), Mathematics Department, 6188 Bradley Hall, Dartmouth College, Hanover, NH 03755. Applications of Vassiliev invariants to the classification of pseudo-Legendrian knots.

Let  $V_C$  be a vector field that is everywhere transverse to a contact structure C on  $M^3$ . A knot  $K \subset (M, V_C)$  is pseudo-Legendrian if it is nowhere tangent to  $V_C$ . Every pseudo-Legendrian knot is naturally framed by taking the vector field  $V_C$  along the knot. We show that for many framed knots  $K_f$  Vassiliev invariants of pseudo-Legendrian knots distinguish pairwise all the pseudo-Legendrian knots realizing  $K_f$ .

The construction uses the isomorphism of the groups of Vassiliev invariants of Legendrian and of pseudo-Legendrian knots proved by us previously. (Received February 14, 2005)