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**T. H. Wears\*** (wearsth@longwood.edu). *The Geometry of Curves and Surfaces in the Three-dimensional Lie Group  $E(1, 1)$* . Preliminary report.

We study the geometry of curves and surfaces in the three-dimensional Lie group  $E(1, 1)$  equipped with left invariant Lorentzian metric by utilizing the Fels-Olver moving frame method. In doing so, we present complete sets of differential invariants for curves and surfaces in  $E(1, 1)$  when the dimension of the isometry group is four. We provide a geometric interpretation of the invariants for certain classes of curves and surfaces and provide a brief comparison with differential invariants generated by alternative methods. (Received September 26, 2017)