1006-53-90 **Magdalena Daniela Toda*** (`mtoda@math.ttu.edu`), Texas Tech University, Dept of Mathematics and Statistics, MS 1042, Lubbock, TX 79409-1042. *The Geometry of Harmonic maps into Special Linear Groups.* Preliminary report.

A specific geometric interpretation will be given to harmonic maps into $SL(2, \mathbb{C})$. As an application, the report also includes a Lie-group theoretical construction of minimal immersions ($H = 0$) in hyperbolic spaces $\mathbb{H}^3(-c^2)$. This method will be provided in its most general form, and then illustrated with a few examples. If time permits, a generalization for harmonic maps into $SL(n, \mathbb{C})$ will be discussed. (Received February 08, 2005)