Meeting: 1006, Lubbock, Texas, SS 11A, Special Session on Future Directions in Mathematical Systems and Control Theory

1006-93-49 X Alex Wang* (alex.wang@ttu.edu), Department of Mathematics & Statistics, Texas Tech University, Lubbock, TX 79424-1042. A Projective Metric of Linear Systems.

To capture uncertainties, one needs a metric to measure the distance between nominal and perturbed systems. Since a linear system can be considered as a point in a projective space, a metric in projective space can be used naturally as a matric for linear systems. One major advantage of such a metric over the current known metrics is the simplicity of computation. (Received January 27, 2005)