1077-58-1138   **Michael Wolf*** (`mwolf@rice.edu`) and **David Dumas**. *Polynomial Pick forms for affine spheres and real projective polygons.* Preliminary report.

(Joint work with David Dumas.) Convex real projective structures on surfaces, corresponding to discrete surface group representations into SL(3, R), have associated to them affine spheres which project to the convex hull of their universal covers. Such an affine sphere is determined by its Pick (cubic) differential and an associated Blaschke metric. As a sequence of convex projective structures leaves all compacta in its deformation space, a subclass of the limits is described by polynomial cubic differentials on affine spheres which are conformally the complex plane. We show that those particular affine spheres project to polygons; along the way, a strong estimate on asymptotics is found. We will carefully describe the background material. (Received September 16, 2011)