1142-32-234 Nuray Gul* (ngul@math.uh.edu), University of Houston, Houston, TX 77204, and Shanyu Ji and Wanke Yin. Maps from n-Ball into (3n-2)-Ball are determined by its 3-jets. Preliminary report.

Abstract: This talk is based on a joint work with Shanyu Ji and Wanke Yin. In 2017, Ji and Yin proved that any map in $Rat(\mathbb{B}^n, \mathbb{B}^{3n-2})$ have degree less than or equal to 3. Also, they found a criterion for maps in $Rat(\mathbb{H}^n, \mathbb{H}^{3n-2})$ with degree 2. Now, we are studying maps in $Rat(\mathbb{H}^n, \mathbb{H}^{3n-2})$ with $\kappa_0 = 2$ and degree 3 to understand maps in $Rat(\mathbb{B}^n, \mathbb{B}^{3n-2})$ well. In this talk, we will discuss any normalized map $F \in Rat(\mathbb{H}^n, \mathbb{H}^{3n-2})$ with $\kappa_0 = 2$ and deg(F) = 3 is determined up to jet degree 3. (Received September 04, 2018)