1148-35-166 **Feng Zhou*** (fzhou@math.ecnu.edu.cn), 500, Dong Chuan Road, School of Mathematical Sciences, East China Normal University, Shanghai, 200241, Peoples Rep of China. *On the Conformal Q-Curvature Equation in Higher Dimensions.*

We present some existence results about the following polyharmonic equation

$$(-\Delta)^n u = K(x)e^{2nu} \quad \text{in} \quad \mathbb{R}^{2n}, \tag{1}$$

where $n \geq 2$ and $K \not\equiv 0$. This equation naturally arises in conformal geometry. Let K be a given function in $\mathbb{R}^{2n}$, one would like to find a conformal metric $g_u = e^{2u}|dx|^2$ such that $K(x)$ is the Q-curvature of the new metric g_u, then the problem is reduced to find solutions of (**??**). We are interested in solutions to (**??**) with logarithmic growth at infinity with non constant curvature K, i.e. solutions verifying satisfying $u(x) = O(\ln|x|)$ as $|x| \to \infty$. Mainly we will discuss the nonpositive Q-curvature case. This is a joint work with X.Huang and D.Ye. (Received February 01, 2019)