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Aslihan Demirkaya* (ademirkaya@math.ku.edu), Lawrence, KS 66044. *Long Time Behavior of radially symmetric solutions of higher dimensional Kuramoto-Sivashinsky Equation.*

We consider the radially symmetric solutions of the Kuramoto Sivashinsky equation in a shell domain $r_0 \leq r \leq R_0$ in any dimension n . Using Lyapunov function approach, we study the long time behavior of the solutions and prove that there exists a time independent bound for the L^2 norm of the solution. First we prove the result for any n -dimensional shell domain which does not contain the origin. Then we include the origin and show the similar results for some special radially symmetric solutions. (Received August 12, 2010)