1120-05-306   **József Balogh**, **Michelle Delcourt**, **Bernard Lidický** and **Cory Palmer***
(`cory.palmer@umontana.edu`). *Rainbow copies of C_4 in edge-colored hypercubes.*

For positive integers k and d such that $4 \leq k < d$ and $k \neq 5$, we determine the maximum number of rainbow colored copies of C_4 in a k-edge-coloring of the d-dimensional hypercube $\mathcal{Q}_d$. We will also discuss a generalization of this problem concerning rainbow copies of Q_s in a k-edge-coloring of Q_d. (Received February 23, 2016)