1125-20-720   **Violeta Vasilevska*** (`violeta.vasilevska@uvu.edu`), 800 W University Parkway, Orem, UT 84058. *Comparing the large scale structure of Cayley graphs of the group of integers.*
In this presentation the following problem (posed by Richard E. Schwartz) will be discussed: Are the Cayley graphs $C_2 = Cay(\{Z\}, \{\pm 2^k\})$ and $C_3 = Cay(\{Z\}, \{\pm 3^k\})$, for $k = 0, 1, 2, \ldots$, quasi-isometric? Namely, the problem asks if these two spaces are alike ("the same") when their large-scale shape structure is compared. We present what has been known about these two spaces in regards to this still-open problem. Then a particular class of maps will be considered and we will prove that these maps are not quasi-isometries between C_2 and C_3. Possibilities for further work will also be discussed.

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