

Stephen Eberhart Memorial Quilt – A Proposal

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Since Stephen had such an impact on everyone involved with Math Art, I propose a memorial quilt in his honor. In Baltimore in 2002, he had his diagrams of the article he had in Bridges 89 concerning using color as the artistic method of showing $d=(x*x + y*y)$ to $\frac{1}{2}$ mod several numbers.

I made three samples and sent them to Stephen. There was one he liked best so that is the form the quilt will take.

| | | | | | | |
|----|----|---|----|----|----|----|
| 10 | 2 | 1 | 6 | 0 | 9 | 7 |
| 12 | 0 | 3 | 8 | 2 | 11 | 9 |
| 3 | 4 | 7 | 12 | 6 | 2 | 0 |
| 9 | 10 | 0 | 5 | 12 | 8 | 6 |
| 4 | 5 | 8 | 0 | 7 | 3 | 1 |
| 1 | 2 | 5 | 10 | 4 | 0 | 11 |
| 0 | 1 | 4 | 9 | 3 | 12 | 10 |

Using mod 13 and the above as the upper right quadrant cell for a P4G symmetry the quilt would be 14 X 14 and need 196 pieces each a 2.5 inches by 2.5 inches. Cotton is the common quilt material. It could be made larger if we get more people involved. Basically I would like everybody to bring fabric that reminds him or her of Stephen. If everyone brings or sends fabric to Bridges this summer, I can bring/borrow a sewing machine and we can have it together by the end of the conference.

COLOR SCHEME

- 0 = Black
- 1 = White
- 2 = Yellow
- 3 = Red
- 4 = 2 X 2 = Yellow print on Yellow fabric
- 5 = Blue
- 6 = 2 X 3 = Red print on yellow fabric or Yellow print on red fabric
- 7 = Violet
- 8 = 2 X 2 X 2 = Dark yellow print on yellow fabric
- 9 = 3 X 3 = Red print on red fabric
- 10 = 2 X 5 = Green print
- 11 = Brown
- 12 = 2 X 2 X 3 = Yellow print on orange fabric

The color to fabric transition is that a prime number is a solid color while a composite number is a print composed of the prime factors. Since 0 and 1 are neither prime nor composite, they may be solid or they may be prints.

