

March 31, 2015

Dear Dr. Strangelove:

Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetur adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

Here are a number of citations on a problem we cite in our research article<sup>1,2</sup>. The latest paper, based on constructive methods that combine Legendre/Jacobi sequences and a steepest descent algorithm, reports merit factors approaching the value of 6.4382. This paper has been recommended by Associate Editor for Sequences in 2011, M. G. Parker<sup>3</sup>. The largest *proven* asymptotic merit factor of 6, for quarter-rotated Legendre sequences, has been published in 1991<sup>4</sup>.

Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetur adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

A project similar to ours is the on-going effort on the computation of the optimal Golomb rulers<sup>5,6</sup>. Also, here is an article about the clique problem<sup>7</sup>. Quisque ullamcorper placerat ipsum. Cras nibh. Morbi vel justo vitae lacus tincidunt ultrices. Lorem ipsum dolor sit amet, consectetur adipiscing elit. In hac habitasse platea dictumst. Integer tempus convallis augue. Etiam facilisis. Nunc elementum fermentum wisi. Aenean placerat. Ut imperdiet, enim sed gravida sollicitudin, felis odio placerat quam, ac pulvinar elit purus eget enim. Nunc vitae tortor. Proin tempus nibh sit amet nisl. Vivamus quis tortor vitae risus porta vehicula.

MANY THANKS.

Sincerely,

Ann Brown, John Doe, and Fred Somebody

<sup>1</sup> P. Borwein, K.-K.S. Choi, and J. Jedwab. Binary sequences with merit factor greater than 6.34. *Information Theory, IEEE Transactions on*, 50(12):3234–3249, Dec 2004

<sup>2</sup> Raymond A. Kristiansen and Matthew G. Parker. Binary sequences with merit factor  $> 6.3$ . *Information Theory, IEEE Transactions on*, 50(12):3385–3899, Dec 2004

<sup>3</sup> J.M. Baden. Efficient optimization of the merit factor of long binary sequences. *Information Theory, IEEE Transactions on*, 57(12):8084–8094, Dec 2011

<sup>4</sup> J.M. Jensen, H.E. Jensen, and T. Holdt. The merit factor of binary sequences related to difference sets. *Information Theory, IEEE Transactions on*, 37(3):617–626, May 1991

<sup>5</sup> Golomb Rulers Project. <http://www.distributed.net/OGR>, March 2015

<sup>6</sup> Golomb Ruler Wikipedia. [http://en.wikipedia.org/wiki/Golomb\\_ruler](http://en.wikipedia.org/wiki/Golomb_ruler), March 2015

<sup>7</sup> Clique problem, From Wikipedia, the free encyclopedia. [http://en.wikipedia.org/wiki/Clique\\_problem](http://en.wikipedia.org/wiki/Clique_problem), March 2015

## References

- [1] P. Borwein, K.-K.S. Choi, and J. Jedwab. Binary sequences with merit factor greater than 6.34. *Information Theory, IEEE Transactions on*, 50(12):3234–3249, Dec 2004.
- [2] Raymond A. Kristiansen and Matthew G. Parker. Binary sequences with merit factor  $> 6.3$ . *Information Theory, IEEE Transactions on*, 50(12):3385–3899, Dec 2004.
- [3] J.M. Baden. Efficient optimization of the merit factor of long binary sequences. *Information Theory, IEEE Transactions on*, 57(12):8084–8094, Dec 2011.
- [4] J.M. Jensen, H.E. Jensen, and T. Hoholdt. The merit factor of binary sequences related to difference sets. *Information Theory, IEEE Transactions on*, 37(3):617–626, May 1991.
- [5] Golomb Rulers Project. <http://www.distributed.net/OGR>, March 2015.
- [6] Golomb Ruler Wikipedia. [http://en.wikipedia.org/wiki/Golomb\\_ruler](http://en.wikipedia.org/wiki/Golomb_ruler), March 2015.
- [7] Clique problem, From Wikipedia, the free encyclopedia. [http://en.wikipedia.org/wiki/Clique\\_problem](http://en.wikipedia.org/wiki/Clique_problem), March 2015.