Review of: "Bent Functions and Strongly Regular Graphs"

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Potential competing interests: No potential competing interests to declare..

Paper Title

Bent functions and strongly regular graphs

Comments

Dear Authors,

Taking the following comments into account might help to strengthen the work:

1. The abstract efficiently conveys the core focus of your note, elucidating the connection between bent functions and strongly regular Cayley graphs. The mention of parameters and conditions for (n, m)-bent functions adds depth to the content. To further enhance the abstract, consider briefly elaborating on the specific cryptographic applications or implications of bent functions. This would provide readers with a clearer understanding of the practical significance of the mathematical concepts discussed.

2. Your introduction to the Cayley graph associated with Boolean functions is well-structured and clear. Consider providing a bit more explanation or context for the presented results, highlighting their significance. Additionally, providing more information about the sources referenced ([13], [1, Theorem 1], [1, Proposition 2]) could improve accessibility for readers.

3. In the context of strongly regular graphs associated with bent functions, are there specific applications or cryptographic scenarios where these findings could be particularly advantageous or relevant?

4. In asserting the properties of strongly regular graphs and their relationships with bent functions, consider providing references to relevant literature. This will not only enhance the credibility of your work but also guide interested readers to explore the foundational research in this domain.

Many Thanks.