

Review of: "Bent Functions and Strongly Regular Graphs"

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Potential competing interests: No potential competing interests to declare.

I have reviewed the manuscript titled "Bent Functions and Strongly Regular Graphs". The manuscript explores the relationship between bent functions and strongly regular graphs, which is an interesting and potentially valuable contribution to the field of combinatorics and cryptography. However, there are several concerns that need to be addressed through major revisions before the manuscript can be considered suitable for publication.

While the manuscript presents intriguing connections between bent functions and strongly regular graphs, the presentation lacks clarity and coherence. The authors should provide a more structured and systematic exposition of the main concepts, definitions, and results. Clear definitions of key terms and concepts should be provided to ensure accessibility to readers who may not be familiar with the subject matter.

The manuscript would benefit from a more detailed and rigorous exposition of the theoretical foundations underlying the relationship between bent functions and strongly regular graphs. The authors should provide clear explanations and proofs of the main results, including any relevant theorems, lemmas, or conjectures. Additionally, the significance and implications of these results should be elaborated upon to demonstrate their relevance to the broader mathematical community.

The inclusion of concrete examples and illustrations would enhance the understanding and accessibility of the manuscript. The authors should consider providing examples of bent functions and corresponding strongly regular graphs to illustrate the theoretical concepts discussed in the text. Moreover, graphical representations or visual aids could be used to elucidate complex relationships and patterns, thereby facilitating comprehension for readers.

The manuscript would benefit from a more thorough review and integration of existing literature on bent functions and strongly regular graphs. The authors should discuss how their work relates to and builds upon previous research in the field. Additionally, comparisons with related studies and discussions of the novelty and uniqueness of the proposed approach would strengthen the manuscript's contribution to the existing body of knowledge.

The manuscript exhibits language issues and unclear expression in certain sections, which detract from its readability and impact. The authors should carefully revise the text to improve clarity, coherence, and grammar. Additionally, attention should be paid to the organization of the manuscript to ensure logical flow and coherence between sections.