

[Review Form2](#)

Book Name:	<a href="#">Mathematics and Computer Science: Contemporary Developments</a>
Manuscript Number:	<b>Ms_BPR_2789</b>
Title of the Manuscript:	<b>Hybrid Encryption-Compression Scheme Based on Multiple Parameter Discrete Fractional Fourier Transform with Eigen Vector Decomposition Algorithm</b>
Type of the Article	<b>Book chapter</b>

**PART 1: Review Comments**

<b>Compulsory</b> REVISION comments	<b>Reviewer's comment</b>	<b>Author's Feedback</b> <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<b>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</b>	This manuscript introduces a novel encryption-compression scheme using multiple-parameter discrete fractional Fourier transform (MPDFRFT) with random phase matrices, thus by enhancing both data security and image quality. It surpasses traditional FRFT and DFRFT methods by offering better performance for multimedia processing. The double random phase encryption strengthens security, making it valuable for secured communication. I appreciate the innovative combination of encryption and compression techniques	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	The given title suits well.	
<b>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</b>	<ul style="list-style-type: none"> <li>• Highlight the contributions of the research more clearly such as advantages of MPDFRFT</li> <li>• The performance is stated as improved based on PSNR and Compression Ratio. This is to be affirmed with quantification/differentiation when compared to other methods</li> <li>• The abstract could end with a sentence on the practical implications of the research such as real world application in multimedia transmission and storage</li> </ul>	
<b>Are subsections and structure of the manuscript appropriate?</b>	Yes, the subsections and structure of the manuscript appears to be appropriate, based on the information provided. The presumed structure follows a typical scientific format, addressing key elements such as problem definition, methodology, results and comparison with existing techniques.	
<b>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</b>	<ul style="list-style-type: none"> <li>• The proposed scheme demonstrates significant improvements in both encryption and compression, as exhibits with the detailed performance metrics like PSNR values across multiple images.</li> <li>• The consistency of the results across different Compression Ratios (CRs) indicates a well-validated method.</li> <li>• The manuscript addresses critical aspects of encryption security by demonstrating high resistance to brute force attacks and key sensitivity, which are essential for real-world applications</li> <li>• The computational complexity remains constant when compared with the existing methods like DFRFT. This ensures the practicality of the proposed system, making it efficient without compromising on performance.</li> </ul>	
<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b>	In order to strengthen the manuscript, inclusion of more relevant recent references (after 2020) would be beneficial.	

**Review Form2**

Minor REVISION comments <b>Is the language/English quality of the article suitable for scholarly communications?</b>	<ul style="list-style-type: none"><li>• Yes, the article's quality of English is suitable for scholarly communication.</li><li>• The article effectively communicates complex concepts and technical details related to data encryption and compression.</li><li>• The article's structure allows for a logical flow of information, discussion of results, encryption resistance and computational complexity. The overall grammar and sentence structure supports the communication of ideas.</li></ul>	
<b>Optional/General</b> comments	The article presents a well-structured and detailed analysis of an encryption and compression scheme with clear results and technical accuracy. The language is appropriate for scholarly communication, though minor revisions for clarity and consistency would enhance readability. Overall, the article is suitable for acceptance with minor improvements.	

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

Name:	<b>J. Sai Geetha</b>
Department, University & Country	<b>Bishop Heber College, India</b>