

INTRODUCTION

Randomness is a central concept in many areas of science and engineering. It is often used to describe phenomena that are unpredictable or uncertain. The study of randomness has led to the development of many mathematical tools and techniques, including probability theory, statistics, and stochastic processes. In this introduction, we will discuss the concept of randomness and its applications in various fields.

One of the most common applications of randomness is in the study of complex systems. These systems are often characterized by a large number of interacting components, and their behavior is highly unpredictable. By modeling these systems as random processes, we can gain insights into their overall behavior and dynamics. For example, the study of random walks and Brownian motion has led to the development of many important results in physics and biology.

Another important application of randomness is in the field of signal processing. Many signals are inherently random, and understanding their statistical properties is crucial for their analysis and processing. Techniques such as spectral analysis and wavelet transforms are used to extract information from random signals. The study of random signals has also led to the development of many important results in communication theory and data science.

Randomness is also a key concept in the study of chaos and complexity. Chaotic systems are characterized by their extreme sensitivity to initial conditions, and their behavior is highly unpredictable. By studying the statistical properties of chaotic systems, we can gain insights into their underlying structure and dynamics. The study of chaos and complexity has led to the development of many important results in mathematics, physics, and biology.

In conclusion, randomness is a central concept in many areas of science and engineering. Its study has led to the development of many important mathematical tools and techniques, and its applications are wide and varied. In this introduction, we have discussed the concept of randomness and its applications in various fields. We hope that this introduction has provided you with a basic understanding of the concept and its importance.

(1999), (1997).

(1997), (2006).

(2001), (2006).

(2001), (2006).

(2002).

(1974).

(500 650,).

-1

75:25.

2-

(1999).

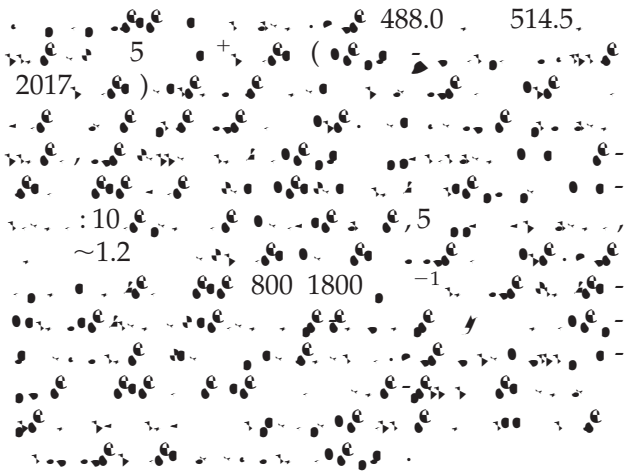
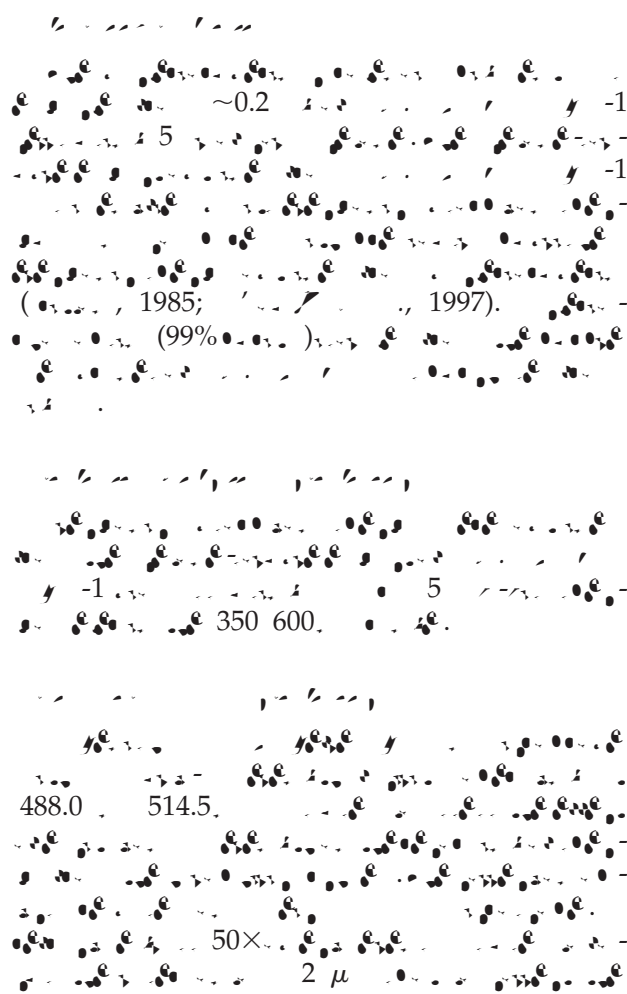
(1995)

(1979).

(1999), (1997).

(2000), (2005, 2004), (2005),

...
...
...
... (y ... z) ...
... (y ... z) ...



RESULTS AND DISCUSSION

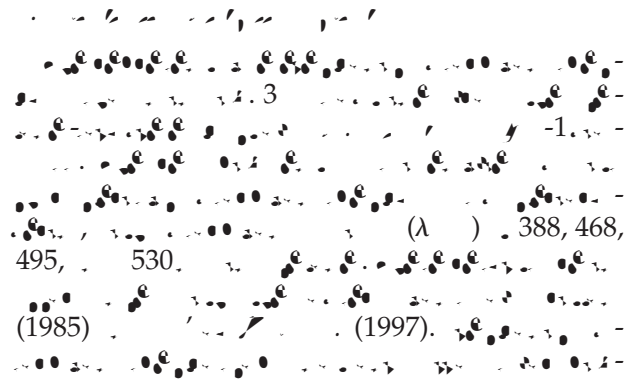


FIG. 3. T a a - λ a *Hb. alinar m NRC-1* 468, 495, 530.

10^5

(~150)

3)

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3)

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1^1

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β -
 488.0 514.5
 (, 2006)
 514.5

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-1,
 1000, 1152, 1505
 (5). 1000, 1152, 1505

$\nu_1^{-1}(\nu_1(x)) = x$ (13)

(2)

(2003)

50

(1600 1500⁻¹), (1400 1250⁻¹), (1250
1100⁻¹), (1000 700⁻¹)

• • • • • (• • • • •)

... 1991). ... 488.0 ... 514.5 ... 780 ... (2003), ... (2004).

... (...) ...

CONCLUSION

... 514.5 ... 514.5 ...

$\nu_1 = 1505^{-1} = 13 = 168, 68-71$.
 (2004) 35, 470-474.
 (2005) 174, 560-571.
 (2003) 3, 565-579.
 (1989) 1, 2-3, 25, 601-604.
 (1999) A 28, 367-399.
 (1974) 20, 241-243.
 (2001) A 1, 161-164.
 (1979) 2, 1-73.
 (2006) 41, 182-189.
 (2002) 39, 1-7.
 (1996) 35, 7802-7811.
 (1995) 53, 50-23, 23, 627-634.
 (2005) 77, 212-221.

ACKNOWLEDGMENTS

The authors thank the following individuals for their assistance in the preparation of this manuscript: Dr. [Name], Dr. [Name], and Dr. [Name].

ABBREVIATIONS

The following abbreviations are used throughout the text:

REFERENCES

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 (1985) 111, 113-149.
 (2004) 63-115.
 (1982) 262.
 (1999) 74, 311-345.
 (1995) A A

225-230.
 (1997) (20%) A 168, 68-71.
 (2004) 35, 470-474.
 (2005) 174, 560-571.
 (2003) 3, 565-579.
 (1989) 1, 2-3, 25, 601-604.
 (1999) A 28, 367-399.
 (1974) 20, 241-243.
 (2001) A 1, 161-164.
 (1979) 2, 1-73.
 (2006) 41, 182-189.
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