

# Differential Evolution – A diversity approach

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**Abstract** Insert your abstract here. Include keywords, PACS and mathematical subject classification numbers as needed.

**Keywords** Diversity · Differential Evolution · Evolutionary

## 1 Introduction

\*Sub-introduction generally speakin of Evolutionary Algorithms. \*Brief history of the Differential Evolution, described in the Lampinen book. \*Importance of the weakness in Differential Evolution: +Premature convergence and loss of diversity +Influence of parametrization (A Parameter Study for Differential Evolution) \*\*Organization of the paper.

## 2 Differential Evolution

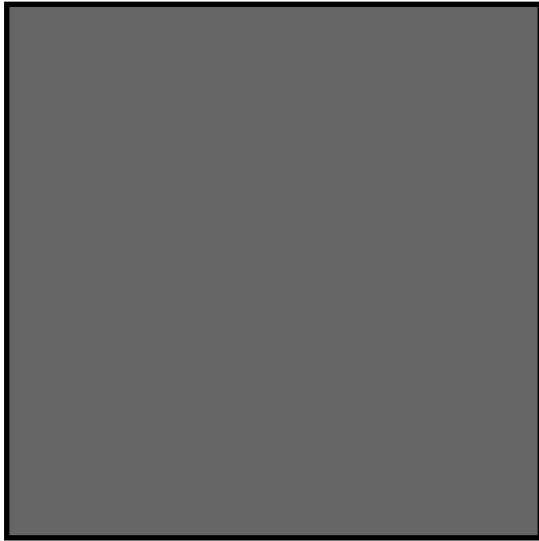
\*Fundamentals. - Fully description of Differential Evolution. — Description of differential evolution. \*Description of the single-objective problem. \*Explain each stage in DE. \* \*

—Diversity Revision \*Explain the influence of the paramters. \*Show the implication of these operators with the population diversity. \*Talk about hybrid and adaptive strategies.

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**Fig. 1** Please write your figure caption here

**Table 1** Please write your table caption here

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### 3 Differential Evolution Trends

#### 4 Proposal

#### 5 Experimental Study

#### 6 Conclusion

Text with citations [2] and [1].

##### 6.1 Subsection title

as required. Don't forget to give each section and subsection a unique label (see Sect. ??).

*Paragraph headings* Use paragraph headings as needed.

$$a^2 + b^2 = c^2 \tag{1}$$

[1]



**Fig. 2** Please write your figure caption here

## References

1. M.A. Berger, in *Magnetic Helicity in Space and Laboratory Plasmas*, ed. by M. Brown, R. Canfield, A. Pevtsov (Geophys. Monogr. Ser. 111, AGU, 1999), pp. 1–9

## References

1. Author, Article title, Journal, Volume, page numbers (year)
2. Author, Book title, page numbers. Publisher, place (year)