



MASTER RESEARCH INTERNSHIP



BIBLIOGRAPHIC REPORT

First Integrals for Planar Vector Fields

Domain: Symbolic Computation - Mathematical Software

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1 Introduction

Why we care? Physical modelling etc

2 Planar Vector Fields

2.1 First integrals

2.2 Darboux Polynomials

3 Computing first integrals

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4 the Extactic method

4.1 definition

4.2 necessary conditions

4.3 what is done wrt state of the art in implementation and why this internship matter

5 Physical models

5.1 Relation between what exists/what this brings

6 Conclusion

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