Computer methods for astrodynamics

INCLUDES EXAMPLES WITH POLIASTRO SOFTWARE

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Preface

This book tries to describe in detail all the principles for astrodynamics, orbital mechanics and orbit determination. Reader will also find non common topics such us timescales, reference frames and low-thrust maneuvers, for example. My intention writing this book is not only to have a reference manual on astrodynamics but also an opensource book on the topic, so anyone can contribute and add more information, chapters, references or algorithms.

Some errata may appear along this book, although intention is always good. If found, please send me an email to ingenierodeaviones@gmail.com or just open an issue in the official GitHub repository at https://github.com/jorgepiloto/astrobook. You can also correct by yourself the errata and open a pull request so it can be corrected in future versions.

Finally, I want to thank all open-source community. No matter if you contribute to scientific, engineering or web projects, sharing knowledge will guide humanity towards a real free world. For that reason this book has been developed using only open-source tools such us LATEX, Inkscape and Python.

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Astrodynamics introduction

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