#### **Accepted Manuscript**

Hypergeometric solutions to a three dimensional dissipative oscillator driven by aperiodic forces

Alessio Bocci, Giovanni Mingari Scarpello, Daniele Ritelli

PII: \$0307-904X(17)30503-6 DOI: 10.1016/j.apm.2017.07.055

Reference: APM 11905

To appear in: Applied Mathematical Modelling

Received date: 15 December 2016

Revised date: 18 July 2017 Accepted date: 31 July 2017



Please cite this article as: Alessio Bocci, Giovanni Mingari Scarpello, Daniele Ritelli, Hypergeometric solutions to a three dimensional dissipative oscillator driven by aperiodic forces, *Applied Mathematical Modelling* (2017), doi: 10.1016/j.apm.2017.07.055

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

#### ACCEPTED MANUSCRIPT

### Highlights

- Complete case of the Coriolis theorem under viscous drag
- $\bullet$  ODE solved via the hypergeometric functions.
- Solution analysis for different parameters.
- $\bullet$  Polar trajectory. Analytic approximate solution to the ODE with dry friction.
- Fourier-Bessel expansion to evaluate integrals in the Lagrange variational method.



# دريافت فورى ب

## ISIArticles مرجع مقالات تخصصی ایران

- ✔ امكان دانلود نسخه تمام متن مقالات انگليسي
  - ✓ امكان دانلود نسخه ترجمه شده مقالات
    - ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
  - ✓ امكان دانلود رايگان ۲ صفحه اول هر مقاله
  - ✔ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
    - ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات